February 2007

DRA

Highway Transportation Plan

The Delta Development Highway System

DELTA REGIONAL AUTHORITY

OFFICE OF THE FEDERAL CO-CHAIRMAN

February 26, 2007

It is a pleasure to present the initial plan for the Delta Development Highway System. This plan represents the culmination of thousands of hours of work by those of us at the Delta Regional Authority and some of our region's top transportation experts. We thank the U.S. Department of Agriculture, which funded this plan. We also thank the local development districts and our other stakeholders in the region.

Our consulting team of Wilbur Smith Associates, Michael Baker Corp. and Neel-Schaffer Inc. did a superb job of compiling the input of many people. Staff members from the Federal Highway Administration and the Appalachian Regional Commission provided additional assistance as we sought to learn from the successes of the Appalachian Development Highway System.

We worked 18 months to agree on criteria and priorities. Approved highway programs for each of our eight states were used in preparing the draft plan. The draft was then presented in a series of public meetings across the region. Local input was crucial to the development of this plan.

This is not a study. It is a plan. This is the first year of a rolling 20-year plan. Since this is a dynamic process, the Delta Regional Authority will continue to work with the transportation departments in each state. We want to keep the plan vibrant and responsive to the needs of the people who live in the 240 counties and parishes we cover.

This initial plan includes 3,843 miles of highway improvements that would cost almost $18.5 billion to complete. The economic benefits to the Delta region and the country as a whole would be huge. It is estimated that a completed Delta Development Highway System would yield almost $3.5 billion annually in the form of higher-paying jobs and improved local economies.

Transportation Secretary Mary Peters put it best when she said in her swearing-in remarks: "We all know that America's continued economic vitality, our ability to compete in a global economy, depends upon dynamic and well-performing transportation systems."

Those of us at the Delta Regional Authority agree. We offer today the Delta Development Highway System as a way to boost our region's economy and the lives of those who live here.

Sincerely,

Pete Johnson
Federal Co-Chairman

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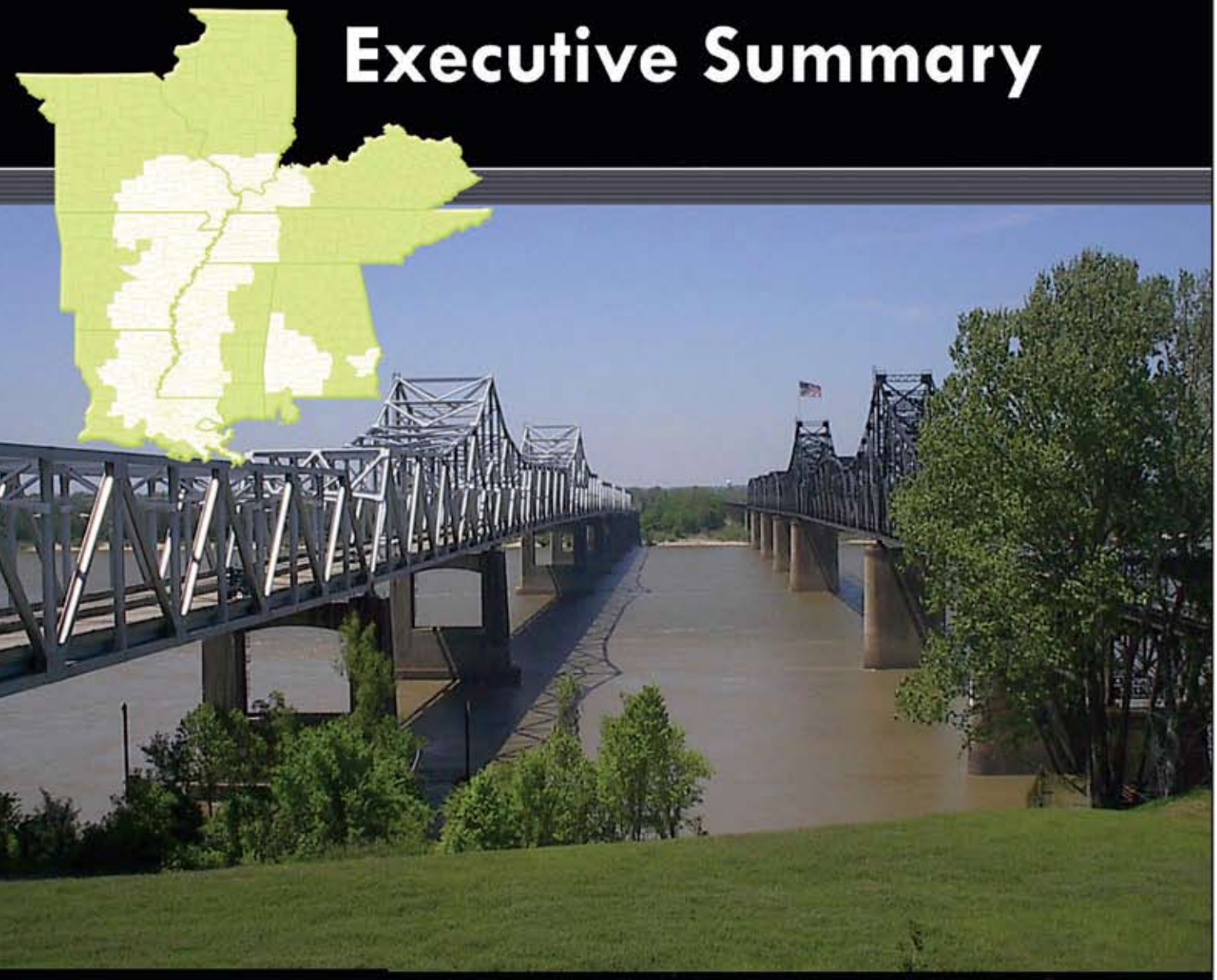
ABBREVIATIONS

AASHTO - American Association of State Highway and Transportation Officials
AL – Alabama
ALDOT – Alabama Department of Transportation
AR – Arkansas
AHTD – Arkansas State Highway Transportation Department
CR – County Road
CY – Calendar Year
DDHS – Delta Development Highway System
DRA – Delta Regional Authority
EDGE – Economic Development and Growth Evaluation
FHWA – Federal Highway Administration
FY – Fiscal Year
IL – Illinois
IDOT – Illinois Department of Transportation
ISTEA - 1991 Federal Highway Bill. Intermodal Surface Transportation Efficiency Act
KY – Kentucky
KYTC – Kentucky Transportation Cabinet
LDD – Local Development District
LA – Louisiana
LA DOTD – Louisiana Department of Transportation and Development
MB – Michael Baker Jr., Inc.
MS – Mississippi
MDOT – Mississippi Department of Transportation
MO – Missouri
MoDOT – Missouri Department of Transportation
MPO – Metropolitan Planning Organization
NHS – National Highway System
NS – Neel-Schaffer, Inc.
SAFETEA-LU – 2005 Federal Highway Bill. Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SASTHO - Southern Association of State Highway and Transportation Officials
SDOT – State Department of Transportation
SR – State Route
STIP – State Transportation Improvement Program
STRAHNET - Strategic Highway Network
TEA-21 - 1998 Federal Highway Bill. Transportation Equity Act for the 21st Century
TN – Tennessee
TDOT – Tennessee Department of Transportation
US – United States
Work Team – Delta Regional Authority, Wilbur Smith Associates, Michael Baker Jr., Inc., and Neel Schaffer, Inc.
WSA – Wilbur Smith Associates

Executive Summary



The Delta Development Highway System

DELTA REGIONAL AUTHORITY

EXECUTIVE SUMMARY

The Delta Regional Authority was established by Congress in 2000 to enhance economic development and improve the quality of life for residents of this region. The DRA encompasses 240 counties and parishes in Alabama, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee.

Led by a federal co-chairman, Pete Johnson, who is appointed by the president and the governors of the eight states, the DRA fosters partnerships throughout the region as it attempts to improve the Delta economy. The DRA is a federal-state partnership created to provide a unified voice for the Delta region on a variety of important issues.

At a planning retreat in February 2005, the DRA board voted to make transportation one of the agency's three major policy development areas along with rural health and information technology. Shortly after that retreat, the DRA contracted with Wilbur Smith Associates (WSA) to assist the authority with transportation planning and economic activities throughout the region.

During the development of the DRA Highway Transportation Plan, the work team coordinated all planning efforts with the eight-state Departments of Transportation (SDOT). Based on this coordination, the work team developed the following:

- Delta Development Highway System (DDHS) Designation Criteria,
- DDHS Design Standards,
- DDHS Corridors,
- DDHS Priorities,
- DDHS Planning-level Cost Estimates,
- DDHS Project Descriptions, and
- DDHS Economic Impact.

Once the draft DDHS was completed, the work team presented the system to federal, state and local agencies and citizens. These local meetings were conducted throughout the DRA region in the following cities:

- Selma, Alabama,
- Cape Girardeau, Missouri,
- Monroe, Louisiana,
- Jackson, Mississippi, and
- Memphis, Tennessee.

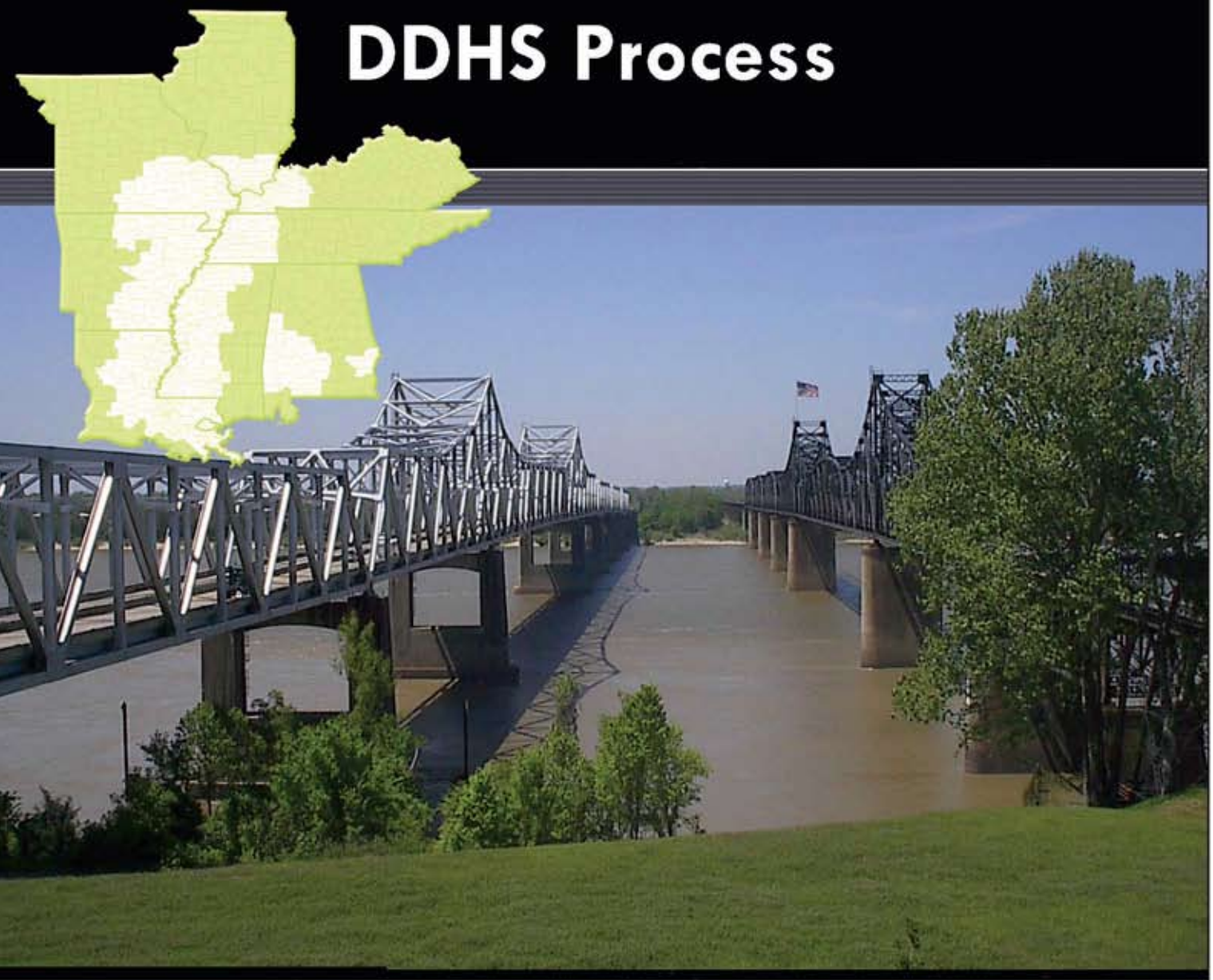
Based on comments received at each local meeting, the DDHS was revised based on approval from each SDOT. To date, the DDHS totals 3,843 miles of roadways throughout the region and the estimated cost to complete planned improvement projects on these roads totals $18.5 billion. Of the 3,843 miles, approximately 1,025 miles (27%) are already multi-laned (provide four or more travel lanes) leaving a total of 2,818 miles of 2-lane roads, as shown in **Table ES1**.

Once completed, the DDHS will provide many positive impacts to the region that will improve economic activities and the quality of life for residents of the region. It is estimated that when fully completed, the DDHS will have an economic impact on the region of over 130,000 additional full-time equivalent jobs annually and nearly $3.5 billion in additional income annually. Of these total impacts, $1.1 billion in income is attributable to increased travel efficiencies and the remaining $2.4 billion is attributable to regional economic development or increased business attraction and retention.

Table ES1 – DDHS, NHS and Square Miles by State (DRA Region only)

State	Total DDHS Miles	Percent of DDHS	Total DDHS 4-lanes	Total DDHS 2-lanes	Percent of DDHS	Total NHS Miles	Percent of NHS Mileage	Total Square Miles	Percent of DDHS Area
Alabama	383	9.97%	124	259	9.20%	809	9.28%	17,124	11.60%
Arkansas	704	18.32%	114	590	20.93%	1,760	20.21%	29,897	20.26%
Illinois	174	4.53%	48	126	4.46%	393	4.51%	6,200	4.20%
Kentucky	230	5.98%	165	65	2.31%	501	5.75%	7,888	5.34%
Louisiana	591	15.38%	107	484	17.19%	1,855	21.30%	29,659	20.10%
Mississippi	753	19.59%	197	556	19.73%	1,509	17.32%	26,247	17.78%
Missouri	566	14.73%	220	346	12.28%	984	11.30%	19,663	13.32%
Tennessee	442	11.50%	50	392	13.91%	899	10.33%	10,908	7.39%
TOTAL	**3,843**	**100.00%**	**1,025**	**2,818**	**100%**	**8,709**	**100%**	**147,585**	**100%**

DDHS Process



THE DELTA DEVELOPMENT HIGHWAY SYSTEM

1. INTRODUCTION

As shown in **Figure 1**, the DRA encompasses 240 counties and parishes in Alabama, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee.

Figure 1 – Delta Regional Authority

During the development of the DRA Highway Transportation Plan, the work team coordinated all planning efforts with the eight-state Departments of Transportation (SDOT), Metropolitan Planning Organizations (MPOs) and Local Development Districts (LDDs) to develop the:

- Delta Development Highway System (DDHS) Designation Criteria (**Table 1**, pg. 4),
- DDHS Design Standards,
- DDHS Corridors,
- DDHS Priorities,
- DDHS Planning-level Cost Estimates,
- DDHS Project Descriptions, and
- DDHS Estimated Economic Impact.

This Plan provides a discussion on the DDHS process, the estimated economic impacts of building the DDHS, and a state-by-state DDHS description.

2. DDHS APPROACH AND DESIGNATION CRITERIA

One of the activities needed to develop the DDHS was to identify and designate a system of highway segments, corridors, and connectors that would serve and enhance the economy of the DRA region. In order for the proposed DDHS to be an effective economic development engine for the region, it must incorporate an integrated system that connects important transportation facilities such as the Interstate Highway System, regional Principal Arterial Highways, the National Highway System (NHS), ports, airports and rail facilities to population, health care, intermodal facilities, educational and economic activity centers throughout the region.

The following presents the approach and designation criteria used to identify segments, corridors and connectors in developing the Delta Development Highway System.

2.1 Approach

1. The work team (DRA staff, Wilbur Smith Associates, Micheal Baker Jr., Inc. and Neel-Schaffer, Inc.) met with state DOT (SDOT) representatives to initiate the DRA Highway Transportation Plan at the annual AASHTO meeting held in Nashville, Tennessee in September 2005.

2. A letter was sent to each SDOT requesting their State Transportation Improvement Program (STIP) and their 20-year long-range plan. Included in the correspondence was the draft designation criteria to develop the draft DDHS.

3. After reviewing the state programs and plans and revising the designation criteria based on SDOT comments, which was accepted by each SDOT, the work team developed the initial draft DDHS identifying proposed highway segments, corridors, and connectors.

4. The draft DDHS map was provided to each SDOT for review and comment. SDOTs were encouraged to contact and collaborate with the Metropolitan Planning Organizations (MPOs) and Local Development Districts (LDDs) in their DRA counties to assist in evaluating the proposed DDHS routes.

5. The work team followed-up with each SDOT to discuss their changes and recommendations.
6. Based on the comments received, the work team developed the next draft DDHS map and presented it to the member state CEOs or their designees at the August 2006 SASHTO meeting in Atlanta.
7. Each SDOT provided revisions to the draft DDHS, DDHS project priorities, planning-level cost estimates and project descriptions.
8. After the SASHTO meeting, the DDHS was presented at five (5) localized, multi-state meetings throughout the region, where the work team took additional input and discussed with the appropriate SDOT for determination in the DDHS.
9. DDHS was presented to the DRA Board at its December 21, 2006 Board Meeting.

2.2 Designation Criteria

The DDHS was designated based on the criteria presented below. Each SDOT reviewed the criteria and some agencies provided suggested revisions or new criteria before the final criteria were finalized as shown in **Table 1** on the following page.

Designation Criteria (in order of importance)

- Functional classification,
- Connectivity / linkages to other facilities,
- Location,
- Limitation, and
- Length.

Table 1 – DDHS Designation Criteria

Functional Classification	• Corridor segment should be defined by the Federal Highway Administration (FHWA) as part of the National Highway System (NHS) or classified as a principal arterial by the state DOT.
Linkages or Connectivity **(Corridor segment must meet at least one of these criteria)**	• Corridor segments must link to each other or to an intermodal facility. • Corridor segment must improve access or connectivity to existing employment, population, health care, intermodal facilities or educational centers. • Corridor segment can be shown to provide a bypass or reliever route for freight movement.
Location	• The entire length of the segment must be within one or more of the 240 DRA designated counties/ parishes.
Limitation	• No more than 25 percent (centerline miles) of the entire DDHS may be within any one of the eight DRA states.
Length	• Segment length should be at least 10 miles, if it does not connect with an intermodal facility.

2.3 DDHS Corridors

Based on the designation criteria, consultation with SDOTs and local agencies, a 3,843-mile DDHS was identified and is shown in **Figure 2** on page 6. The majority of the DDHS consists of existing 2-lane roadways (2,818 miles) and it is the goal of this program to improve these roadways by widening and upgrading. Interstate 69, which traverses DRA counties in Arkansas, Mississippi, Tennessee and Kentucky, is also included in the DDHS and totals approximately 600 miles. The DDHS corridors were developed to ensure economic impacts could be realized throughout the entire DRA region.

Table 2, on the following page**,** shows the breakdown of DDHS miles by state. To ensure an equitable distribution was established between states, National Highway System (NHS) miles and square miles for each state (DRA region only) were calculated and are also shown. There are a total of 8,709 NHS miles in the region and approximately 147,585 square miles. Based on state percentages, the DDHS provides an equitable share among member states. **Figures 3 though 6**, on pages 7 and 8, illustrate these distributions.

Once the draft DDHS was completed, the work team presented the system to federal, state and local agencies and citizens. These localized, multi-state meetings were conducted throughout the DRA region in the following cities:

- Selma, Alabama,

- Cape Girardeau, Missouri,
- Monroe, Louisiana,
- Jackson, Mississippi, and
- Memphis, Tennessee.

Table 2 – DDHS, NHS and Square Miles by State (DRA Region only)

State	Total DDHS Miles	Percent of DDHS	Total DDHS 4-lanes	Total DDHS 2-lanes	Percent of DDHS	Total NHS Miles	Percent of NHS Mileage	Total Square Miles	Percent of DDHS Area
Alabama	383	9.97%	124	259	9.20%	809	9.28%	17,124	11.60%
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Tennessee	442	11.50%	50	392	13.91%	899	10.33%	10,908	7.39%
TOTAL	**3,843**	**100.00%**	**1,025**	**2,818**	**100%**	**8,709**	**100%**	**147,585**	**100%**

Figure 2 – DDHS Corridors

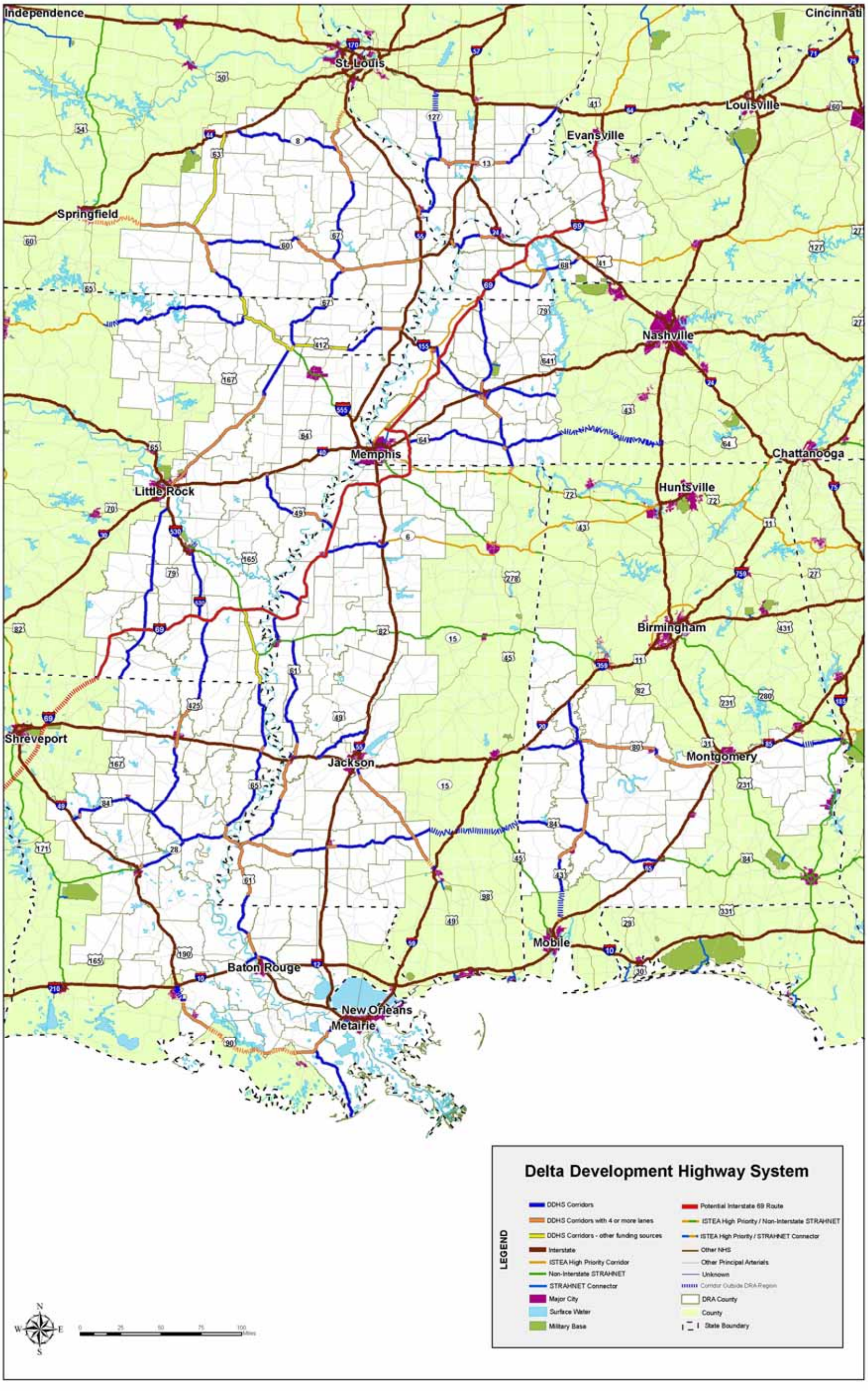


Figure 3 – DDHS Mileage by State
TOTAL MILES = 3,843

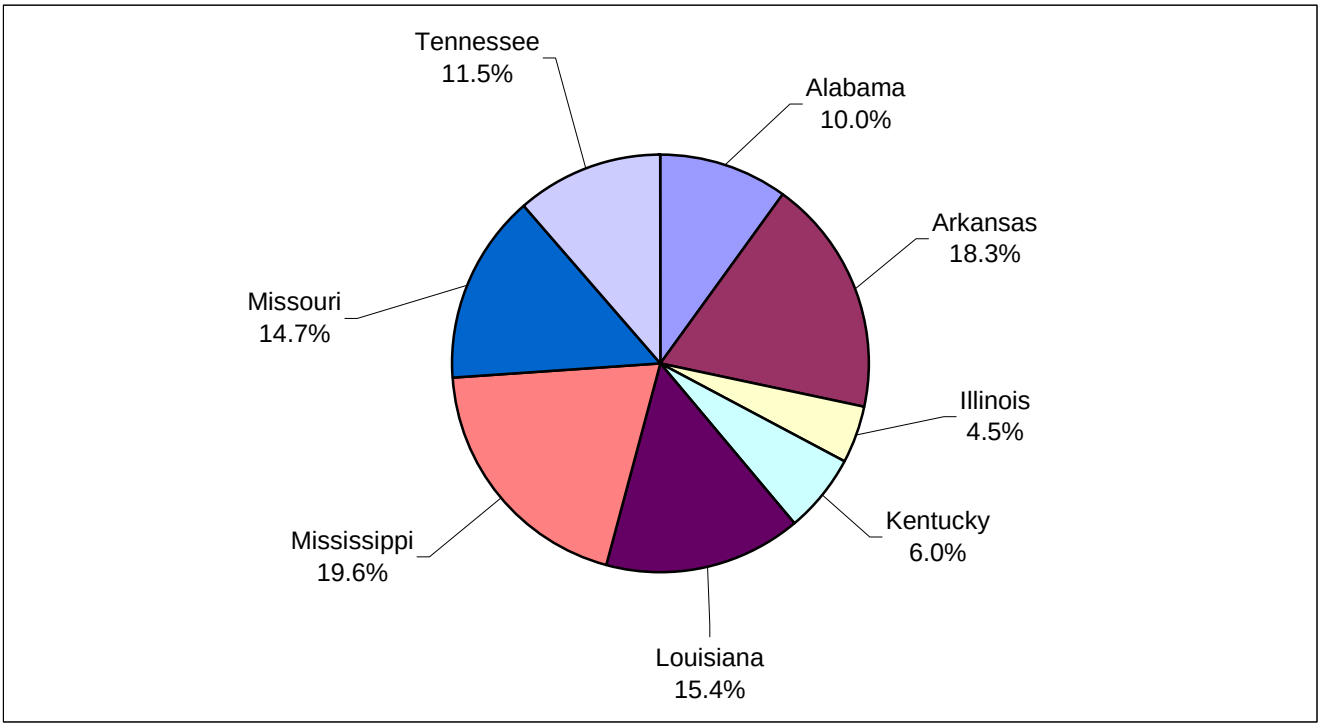


Figure 4 – 2-Lane DDHS Mileage by State
TOTAL MILES = 2,818

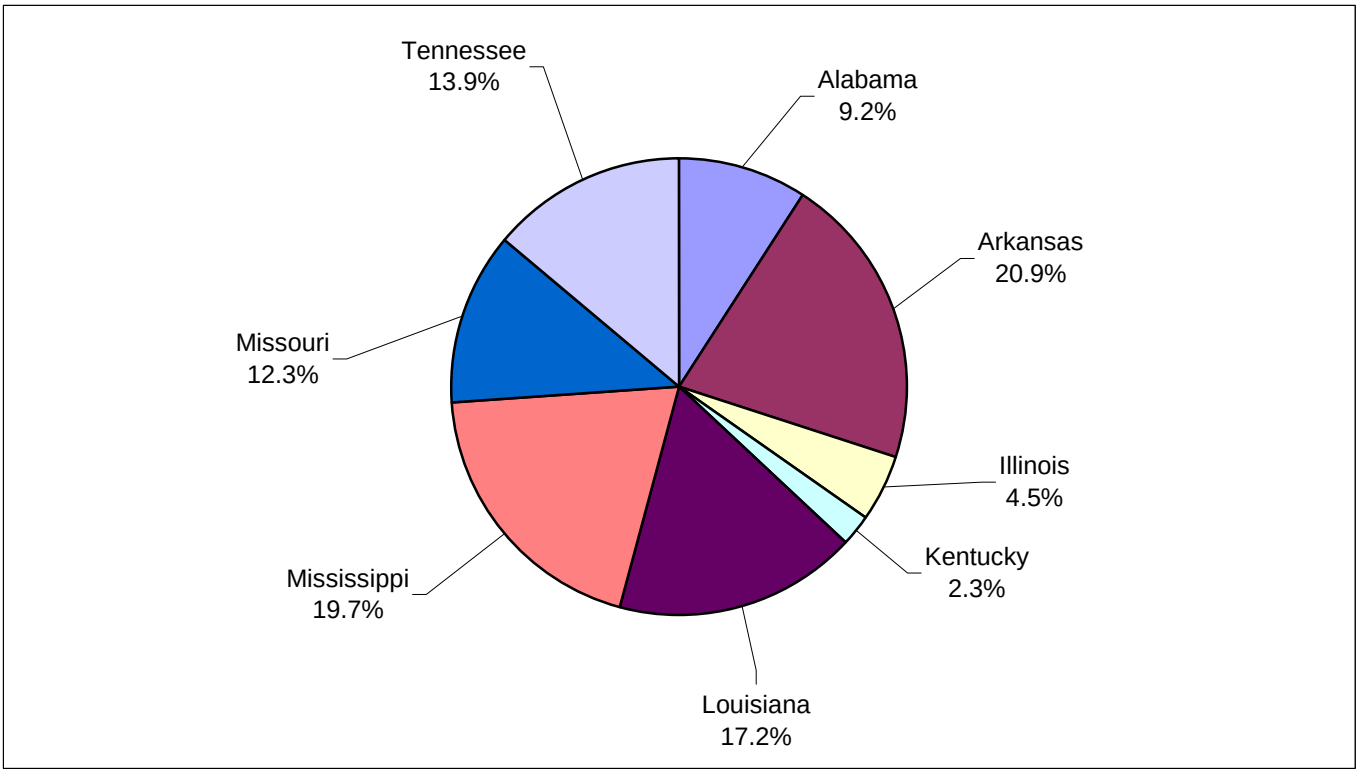


Figure 5 – Total Square Miles by State, DRA Region Only
TOTAL SQUARE MILES = 147,585

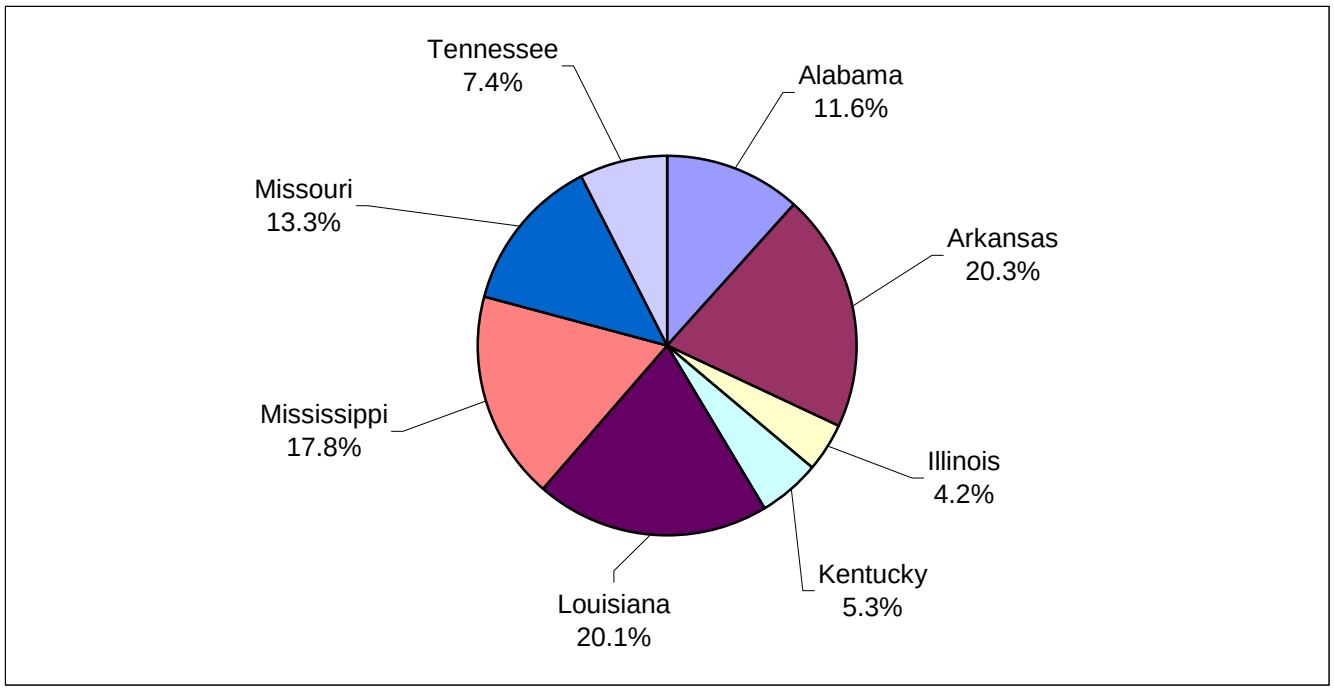
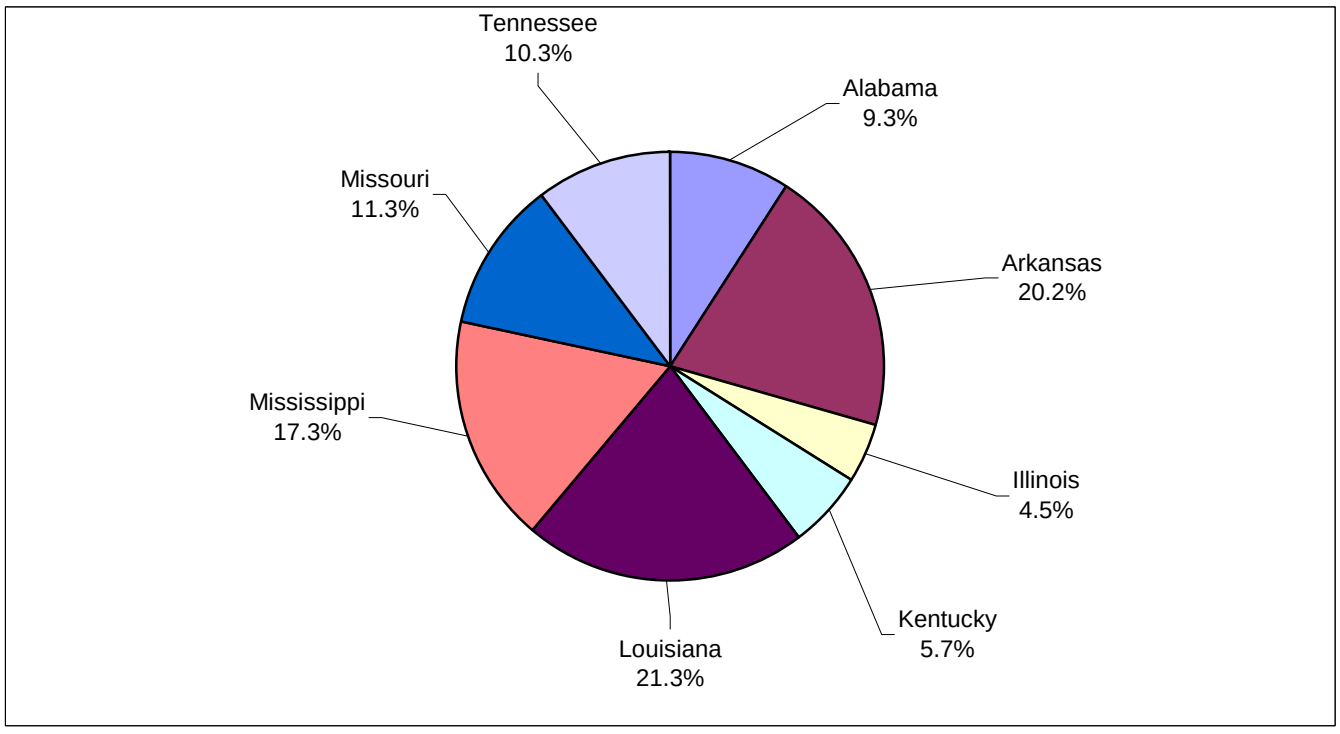


Figure 6 – Total NHS Miles by State, DRA Region Only
TOTAL MILES = 8,709



2.4 DDHS Priorities and Planning-level Cost Estimates

All DDHS priorities and planning-level cost estimates were provided by the responsible SDOT. The priorities are based on a three-tiered system: short-range (0 to 5 years), medium-range (6 to 10 years) and long-range (11 years and beyond). **Table 3** provides the planning-level cost estimates to complete the DDHS for each state by priority tier. The cost estimate to complete the entire DDHS totals $18.5 billion. Based on SDOT priorities, $6.3 billion (34%) of the DDHS is identified in the short-range tier, while 25 and 41 percent, respectively are categorized in the medium- and long-range tiers.

Table 3 – DDHS Planning-level Cost Estimates by State ($ in millions)

	Total Dollars	Short-Range	Medium-Range	Long-range
Alabama	**$803**	$363	$208	$232
Arkansas	**$3,975**	$448	$512	$3,015
Illinois	**$1,439**	$380	$487	$572
Kentucky	**$1,385**	$1,115	$270	$0
Louisiana	**$4,773**	$1,863	$1,038	$1,872
Mississippi	**$3,602**	$1,390	$2,156	$56
Missouri	**$582**	$328	$37	$217
Tennessee	**$1,913**	$423	$0	$1,490
TOTAL	**$18,472**	**$6,310**	**$4,708**	**$7,454**

2.5 DDHS Summary by State

Sections 4 through 11, beginning on page 22, provides a letter of support from each of the eight SDOTs, and a summary of each of the eight states DDHS corridors, planning-level cost estimates, and priorities. Each SDOT was asked to provide their highest priorities based on three scenarios:

- Top three (3) projects regardless of cost,
- Top three (3) project segments if provided a total of $15 million, and
- Top project segment, given $5 million.

2.6 Local Programs

The 3,843 miles identified on the DDHS will provide an improved network of roadways that once completed will assist the movement and people and goods throughout the DRA region. Since the DDHS corridors are typically lengthy (greater than 10 miles), meeting the "last mile" needs from the DDHS to industrial sites, multimodal facilities and new economic development projects will still be needed. Based on these "last mile" needs, the DRA is working toward developing two additional local programs, which will assist in local DRA communities in improving these last miles needs.

2.6.1 Local Program 1

This program will provide assistance to local governments in constructing "links of highways or roads" necessary to connect industrial sites to adequate road facilities.

2.6.2 Local Program 2

This program will incorporate transportation improvements into the DDHS – such as for a major economic development project in the DRA region.

Economic Impacts

The Delta Development Highway System

3. INITIAL HIGHWAY ECONOMIC IMPACT ANALYSIS

Transportation networks that facilitate safe and efficient passenger and goods movements are usually viewed as precursors to regional economic development. The economic benefits that accrue to regional economies often result in new business attraction, enhanced economic competitiveness and improvements in amenities. As such, regional planning authorities are often at the forefront of conceptualizing regional approaches to infrastructure improvement that could bring about such changes.

The Delta Regional Authority's development of a regional highway system traversing its 240-county and parish region is a step toward enhancing the region's economic potential. The extent to which highway investments can lead to increased economic opportunities is a key consideration that must play into the decision-making process and is the purpose of this analysis. It should be noted that this is a high-level analysis and is meant to serve as an order of magnitude in terms of establishing the potential for economic development benefits arising from highway investments in the Delta region. A more detailed analysis examining the system on a segment-by-segment basis is necessary to establish estimates at the level of detail that is typically used for the purpose of benefit cost analysis.

Subsequent sections will comprehensively address the sources of regional economic impact attributable to highway investment. Reviewing pertinent literature of the economic impacts of highway investment will provide insight into what DRA stakeholders could expect in potential economic returns from constructing the DDHS. In addition to the literature review, Wilbur Smith Associates' Economic Development and Growth Evaluation (EDGE) tool is utilized to show the potential employment and income benefits that could arise if transportation was significantly improved throughout the region.

3.1 Economic Benefits

Table 4 displays the results of the constructing the entire 3,843 mile DDHS. As can be seen, the economic impacts of constructing the DDHS creates thousands of temporary and permanent jobs for residents in the eight-state DRA region, as well as generates billions of dollars that will stimulate economic development throughout the DRA region.

Table 4 – Annual Economic Impacts of the Completion of the DDHS

	Annual Impact
Benefit from Increased Travel Efficiency	$1.1 billion in personal income
Benefit from Increased Economic Development Opportunities	$2.4 billion in personal income
Total Economic Benefit	**$3.5 billion in personal income**
Employment (full-time equivalent)	130,000
Construction Jobs (temporary)	104,000[1]

Of the estimated $3.5 billion in annual personal income impact, $1.1 billion is attributable to travel efficiencies such as travel time savings, vehicle operating cost savings and safety benefits. The remaining $2.4 billion in annual personal income impact will result from additional business attraction and expansion opportunities arising from improved accessibility to developable land and markets and improved connectivity to economic centers. The average annual employment benefit of the increased travel efficiency and economic development opportunities of the DDHS is estimated to be approximately 130,000 full-time equivalent jobs with an average annual salary of nearly $27,000. The industries most likely to experience growth include tourism related business such as hotels and motels, retail establishments and eating establishments; warehousing and distribution; food product manufacturing; professional services, including health and educational services; and non-durable manufacturing.

In addition to the longer term benefits of the system to the region, the act of constructing the DDHS will have significant temporary impacts on the region. Based on the estimated construction cost of $18.5 billion, approximately 104,000 temporary construction jobs will be created throughout the eight-state DRA region.[2]

[1] A total of 155,000 construction jobs will be created by constructing the entire DDHS. This is not an annual job creation number.

[2] This estimate is derived using FHWA research on the Economic Impact of Federal-Aid Highway Investment showing that in 1996 for every $1 billion of highway investments, 7,900 direct construction jobs are created. The PPI for materials and components for construction produced by the Bureau of Labor Statistics is used to convert the estimated construction costs of the DDHS to 1996 dollars and then multiplied by 7,900 to get the direct employment impact. It should be noted that the number of jobs and resulting income accruing to the Delta region will depend upon the degree to which those jobs are filled by permanent residents of the region.

3.2 The Sources of Regional Economic Impact

The sources of regional economic impact attributable to highway construction could generally be placed into three categories – direct impacts, increased economic efficiency and strategic development or business attraction impacts. The direct impacts are most commonly associated with highway construction, whereby employment and income created by construction jobs contribute positively to local economies. This type of impact is concentrated most heavily in the short-term and reduced significantly upon completion of the highway.

Transportation improvements lead to increased efficiency and thus, often bolster a region's economic competitiveness. Improved freight movements, better regional connectivity and mitigated congestion reduce transportation costs and frees up resources for other productive uses. This can lead to productivity increases and more competitive pricing. Given the changes in a firm's costs, the opportunity for capital reinvestment and expansion of the regional employment base becomes more likely positively impacting the region's economic performance. These types of impacts are on going and have the potential to significantly change the competitive environment in the DRA region and are included in this analysis.

Business location/relocation that may follow highway construction is an additional potential source of regional economic impact. In addition to more traditional industrial and commercial firm location decisions being impacted by highway construction, the emergence of "roadside service industries" (e.g. gas stations, restaurants, hotels) and new tourism may also be boons to local economies spurred by DDHS investments.

3.3 Highway Construction

A review of the literature concerning the economic impact of highway investment provides a number of "rules of thumb."

- **Infrastructure improvements are necessary but not sufficient conditions for economic growth:** One of the few consensuses one could deduce from the literature is that well-connected transportation networks are necessary for development but not sufficient in and of themselves. It must be viewed as part of a more comprehensive regional effort to improve local workforces, ensure that local economic conditions are conducive to business location (reasonable tax rates, community support for

commerce, sound educational policies and visionary local leadership) and organized business recruitment campaigns.

- **Aggregate multi-county studies of the Interstate Highway System and Appalachian Development Highway System have found higher employment and earnings growth rates in counties served by the highways than those not served.** Studies of regional transportation networks have shown employment and earnings growth among counties impacted by regional networks. However, many of the studies lack concrete, evidence that the highway themselves were the causal factors that have contributed to such growth. Rather, an identification of economic benefits and correlations between highway improvement and economic growth were presented.

A number of studies of the elasticities associated with improvements in highway capital stock show a clear linkage between highway improvement and changes in firm costs, labor, capital and other input demand. An additional set of "rules of thumb" is provided below.

- **The benefits industries derive from highway improvements differ across industries:** A number of studies have shown that regional economies do benefit from highway investments, but some industries benefit more than others. Those industries that more heavily rely on transportation, namely freight-intensive sectors, transportation and logistics as well as service industries where workers often commute especially benefit.
- **Most industries enjoy reduced costs as a result of highway improvements:** Empirical studies of cost elasticities with respect to changes in highway improvements have shown that costs typically decrease when highway capital stock improves.
- **Retail and manufacturing seem to especially benefit from highway improvement:** Researchers have concluded that retail and manufacturing industries particularly benefit from highway improvements. Given that both industries are freight-intensive, economic benefits that result from highway improvement seem quite likely and have been confirmed by empirical analysis.

- **Highway construction has shown a tendency to increase property values and development densities for locations in close proximity to highways:** Some studies have shown that highway construction may alter land-use in close proximity to highway construction. Improved accessibility often makes once vacant parcels candidates for sewer expansion and consequently residential and/or commercial developments thusly-exerting pressure on land values. Local governments, through expanded property tax bases, often benefit from such changes.
- **Industrial returns to infrastructure improvements diminish over time:** Many of the studies consulted show that the direct benefits attributable to highway construction diminish over time. Incremental changes in highway systems may benefit local economies, but they only do so at a decreasing rate.
- **Changes in highway network investment lead to larger changes in productivity growth in vehicle-intensive industries (e.g. Trade and Finance, Insurance, Real Estate, Transportation Equipment and Motor Vehicles and Construction):** In addition to manufacturing and retail, a number of other industries benefit significantly from highway construction including a number of service-oriented industries.
- **Cost reductions due to an increase in highway capital may lead to a reduction in output price:** Cost savings that accrue to businesses as a result of lower transport costs and other savings associated with highway construction have been shown to contribute to lower per unit costs and lower prices for consumers.
- **Highway capital and private capital are complements:** Private capital elasticities with respect to physical capital improvements have been shown to be complementary. Lower costs often allow business to re-invest creating demand for private capital.

Understanding the decision-making process of firms is often quite useful for regional economic stakeholders. The role that improved transportation network linkages play in business location decisions has been the subject of a number of empirical studies attempting to illuminate the role that infrastructure improvements play in a firm's location decision.

"Rules of thumb" for the role that transportation plays in business location/relocation decisions are provided below.

- Traditionally, highway connectivity was a key consideration for many firms but its importance has diminished relative to other site attributes as the nation's system has become more developed: Qualitative studies of industry site attribute preferences show that highway connectivity's importance relative to other locational factors has diminished over time as the connectivity has become less of an issue for many areas, especially urban areas. Contemporarily, proximity to markets, workforce skill levels, state and local tax rates as well as tax incentives play more prominently into a firm's decision locations than highway connectivity. Of course, this varies across industries and tends to more true for service-based industries as opposed to manufacturing and distribution.
- Travel and tourism can be affected by improvements in transportation but literature on the topic is scant; however, it can be assessed much like other topics linking economic development to infrastructure investments: Literature on the role that highway improvements play specifically for tourism is limited. However, studies have shown that tourist-oriented industries (e.g. lodging, eating establishments, retail) have benefited significantly from highway investments. It is reasonable to assume that the construction of a highway system could in fact improve the region's tourist activity. An assessment of the DRA region's attractions and the role that inaccessibility may play in inhibiting tourist activity may be merited to better understand the potential economic impact on tourism arising from the construction of a regional highway. If it is shown that a lack of connectivity or inaccessibility inhibits tourist activity at the region's tourist attractions, constructing a regional system connecting these attractions could have sizable impacts on the region's economy.

3.4 Policy Implications

Empirical studies have conclusively shown that improvements in highways do, in fact, reduce costs, contribute positively to output and productivity as well create demand for additional capital. However, the benefits that accrue to industry are not distributed evenly with some industries benefiting more than others. As such, policymakers would be well

served by identifying regional growth industries to assess which regions are most likely to benefit from highway construction. Having identified which industries were most likely to benefit, an assessment of regional economic bases could illuminate which highway investments make the best strategic investment. The EDGE tool takes into account growth industry projections that will better inform the estimation of the potential economic benefits of the proposed Delta Development Highway System.

3.5 WSA EDGE

As illustrated by the literature cited above, regional economic forces play prominently in determining the economic impacts facilitated by infrastructure improvements. Wilbur Smith Associates has developed the Economic Development and Growth Evaluation (EDGE) system, an analytical tool designed to gauge the larger regional forces that address business location decision and regional economic performance providing the economic context for the proposed highway system. The tool helps to identify under-performing industries in the region and evaluates the role that transportation disadvantages plays in lagging performance. For industries where a transportation disadvantaged is identified, the EDGE tool provides forecasts of regional economic impact of mitigating those disadvantages. By focusing only on industries with a documented transportation disadvantage, stakeholders are provided a more definitive assessment of the role that the proposed highway system would play in facilitating economic growth.

3.6 Overview of the EDGE Tool

The processes outlined in this analysis and carried out by the EDGE tool include three steps:

1. Identify under-performing industries.
2. Evaluate transportation disadvantage, and
3. Estimate impact of mitigating the disadvantage.

The first part of the report's *Economic Base Assessment* provides baseline economic profiles, trends and growth projections for 67 local industries in the counties and parishes in the eight-state DRA region. Each industry is evaluated in terms of the extent to which it experiences an economic performance gap and its potential for local business attraction. An

area is viewed as under-performing if either (a) that industry's share of local employment is significantly lower than its corresponding share in a comparable area, and/or (b) local employment changes in that industry lags behind that industry's national average performance.

A second element of the analysis is evaluating the role of transportation in the under-performance of the industry. This is accomplished by evaluating local business growth/attraction potential for each industry through ratings of area attributes for supporting business growth and attraction. Advantages and disadvantages are defined on the basis of: (1) costs of labor, materials, utilities, transportation and taxes, and the sensitivity of each industry to those cost factors; (2) size and characteristics of the local area's workforce, and the sensitivity of each industry to these labor force qualities; and (3) quality and supply of local infrastructure and facilities to serve economic growth. By evaluating key competitive factors, the EDGE tool identifies those industries in which transportation is considered to be a primary deterrent to growth. For example, each industry is evaluated in terms of how much transportation they require and the efficiency of transportation services in the DRA region relative to the remainder of the counties and parishes in the eight-state region.

The final step in the analysis is to estimate the benefits in terms in increased employment and income in the region arising from highway investments that mitigate the transportation disadvantage. This impact is estimated by assuming that the highway investments could allow the under-performing industries in the region that demonstrated a transportation deficiency to grow at the same rate as the comparison region, which for the purpose of this analysis are the remaining counties and parishes in the eight-state DRA region.

3.7 Local Economic Performance Analysis

The first data collection and analysis element of the EDGE tool evaluates the mix and performance of industries in the DRA region by comparing it with the rest of the counties and parishes in the eight-state region. This technique is used to identify which industry clusters are potential sources of future economic development for the DRA region. Previous literature identifying which industries are most likely to benefit from highway construction will allow for the assessment of the role that the proposed highway could play in bolstering projected growth industries.

3.8 Business Trend Comparison

The business trend comparison component of this analysis uses Shift/Share Analysis techniques to compare the performance of DRA region industries with national performance trends in the same sectors. This technique provides a way to identify regional industries that are particularly thriving or declining and to compare their performance with national industry performance. Those local industries lagging in growth behind comparison area averages may be seen as weaknesses, but they also represent potential future growth opportunities.

The EDGE tool calculates the percent change in the number of employees in each sector for the DRA region and the U.S. over the past ten years. It then computes the ratio of these percentages, which indicates whether the local industry is growing or declining faster or slower than the national industry, or if it is moving in an opposite direction from the national industry (e.g., declining while the national industry is growing or vice versa). The ratios derived from this analysis allow for the identification of under-performing industries.

3.9 Regional Cost Characteristics

An important consideration in business location decisions is costs. All other considerations being equal, businesses tend to locate where they can minimize costs. Costs of labor, housing, electric power and taxes are foremost in this locational calculus. Data regarding these factors are entered into the EDGE tool, which identifies the types of businesses that are most sensitive to each cost factor.

The EDGE tool evaluates where the DRA region's total production costs are advantageous or disadvantageous for each of 67 detailed industries based on the following detailed cost data for the DRA region:

- *Labor costs*. The average wage per hour can be the deciding factor for industries evaluating locations for new production facilities.
- *Electricity costs.* Electricity costs vary widely by region. Power costs can be paramount in determining the location for heavy industries, such as primary metals, which use a lot of power. Costs of other utilities (e.g., natural gas) are also important for some industries.

- *State and local taxes.* Though taxes appear to be minor elements of total business costs, they are an important consideration for businesses seeking to minimize total costs, and they can also be an indicator of the business climate of the area. While the importance of state and local taxes is reduced by their deductibility from federal taxes, taxes are still an important factor influencing some investment and business location decisions.
- *Housing costs.* A cost of both owning and renting residences is a factor that most businesses take into consideration before finalizing decisions about new locations. Housing costs are particularly important for businesses that relocate staff and reimburse them for excessive housing costs incurred by transferees into a new, higher cost area.

Most importantly, the importance of each of these cost factors differs systematically by type of industry. The EDGE tool uses this data to identify how these local factors are area advantages or disadvantages for growing various industries.

3.10 EDGE Results

3.10.1 Competitive Disadvantages

Though a number of industries are projected to expand, the DRA region must address its competitive disadvantages. The EDGE tool identified two competitive disadvantages that may inhibit future economic growth, workforce skill levels and land costs.

Relative to the rest of the nation, the DRA region has lower levels of educational attainment, which limits the types of employment it can attract. As the national economy continues its shift toward a more dominant services sector, the level and supply of skilled workers will play a prominent role in firm location decisions and regional economic performance. Strengthening local workforces through improving K-12 education, ensuring that technical schools serve the needs of local industry and more effective usage of workforce development centers to augment the efforts of technical schools should aid in this effort.

For a few primarily manufacturing industries, land costs were seen as competitive disadvantages. As such, tax incentives that lower the cost of land acquisition and include favorable rates of property taxation may be merited.

3.10.2 Competitive Advantages

The DRA region's competitive advantages are noteworthy and should be considered as regional attributes. Regional wage rates compare quite favorably to the national average. However, lower wages are also indicative of a labor market that is comprised predominantly of employment that does not necessarily bode well for sustainable development. As the DRA region looks to develop economically, jobs that improve the region's standard of living and boost the region's wage levels should be the objective and should inform development priorities. Nevertheless, lower wages are a regional advantage that could be an attractive lure for firms looking to locate in the region.

In addition, regional energy costs and taxes (property, sales and income) are lower than the national averages. Each of these attributes represents lower costs of conducting business in the region and should be promoted as such.

3.11 Conclusion

This analysis provides a number of conclusions that will assist the DRA stakeholders in considering the construction of the DDHS. Stakeholders should consider this initiative as a part of a comprehensive regional development plan. The consensus amongst transportation economist suggests the DDHS could be best viewed as a facilitator of economic development as well as a catalyst of development. In addition, some firms are more likely to benefit than others as the benefits that accrue to regional economies from infrastructure investments are not equally distributed throughout the economy. A number of other factors that also play prominently in firm location decisions also help determine the extent to which economic development follows highway construction (e.g. proximity to markets and inputs, lower taxes and utility rates, workforce skill levels). This analysis has shown that a number of sectors have the potential to expand in the future if transportation disadvantages are mitigated. Once the DDHS is constructed, an estimated $3.5 billion in annual income impact is estimated to occur throughout the eight-state DRA region.

Alabama

The Delta Development Highway System

ALABAMA DEPARTMENT OF TRANSPORTATION
1409 Coliseum Boulevard
P.O. Box 303050
Montgomery, Alabama 36130-3050

Bob Riley
Governor

Telephone: 334/242-6311 - Fax No.: 334/262-8041

Joe McInnes
Transportation Director

December 7, 2006

Mr. Pete Johnson
Federal Co-Chairman
Delta Regional Authority
236 Sharky Avenue
Suite 400
Clarksdale, Mississippi 38614

Dear Mr. Johnson:

I would like to take this opportunity to express my comments regarding the Delta Development Highway System (DDHS) plan and its benefits to the State of Alabama. I agree that the priority projects consisting of U. S. Route 43 from Interstate 65 in Mobile County to Interstate 20/59 in Greene County, U. S. Route 80 from Interstate 20/59 near the Mississippi line in Sumter County to Montgomery and from Interstate 85 in Macon County to Phenix City and U. S. Route 84 from the Mississippi line to Interstate 65 in Conecuh County should be designated DDHS Routes.

I am aware of the importance of the need for improvements on these routes and the major impact it will have on the economically distressed areas involved along with the potential growth to industry. Improvements in these routes should also provide major relief during periods of disaster related to hurricanes and other factors.

The Department is very appreciative of those involved in this planning study and your efforts to finalize the results as the plan nears completion.

I respectfully request your assistance in securing all available funds for improvements on these designated routes.

Sincerely,

D. J. McInnes
Transportation Director

cc: Jeff Carroll, Wilbur Smith Associates

DJM/CRP/ask

4. ALABAMA

There are 19 counties in Alabama that are a part of the DRA region. Alabama is the only member state where the DRA counties are not contiguous. There are a total of 383 DDHS miles identified in Alabama, which constitutes 10 percent of the total DDHS miles, and of these 259 miles are currently 2-lane facilities. The Alabama DDHS improvements consist of widening and upgrading portions of US 43, US 80, and US 84. **Table 5** provides a project description, priority and cost estimate details on each DDHS corridor in Alabama while **Figure 7** shows the Alabama DDHS.

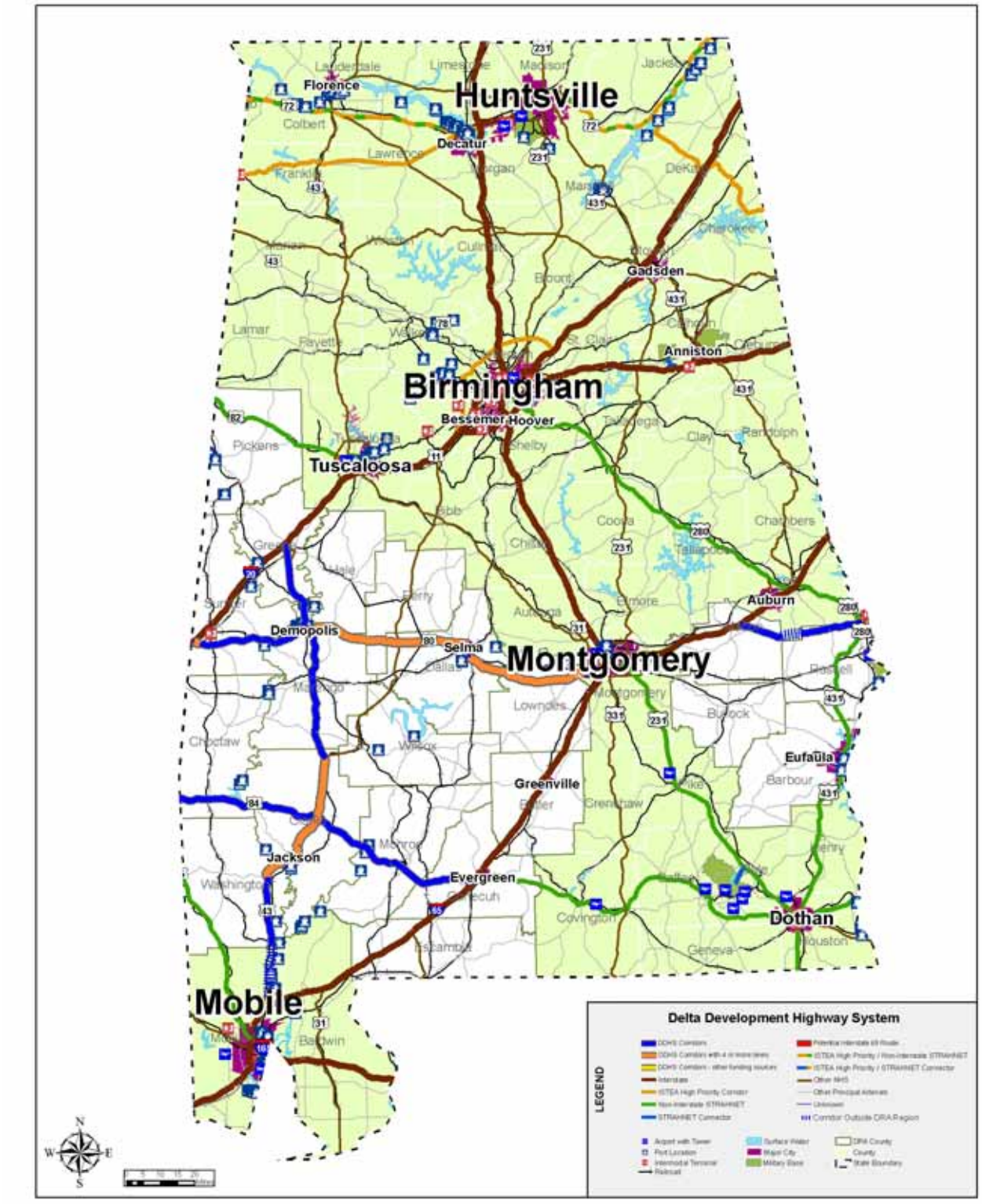
Table 5 – Alabama DDHS (planning-level cost estimates are in millions)

Corridor/Route	Project Description	Cost Estimate	Priority
US 43 Corridor	Add lanes from 5-lane north of Thomasville to Marengo County - Includes Relocation	18.0	Medium-Range
	Add lanes from Clarke/ Marengo County line to Mud Creek	10.0	Medium-Range
	Dixon Mills Bypass from Mud Creek to 1500' south of CR 55	16.0	Short-Range
	Add Lanes from 1500' south of CR 55 north to CR 47	21.0	Long-Range
	Add lanes from CR 47 north to Approximately 1.14 mile south of SR 69	18.0	Long-Range
	From 1.14 miles south of SR 69 to SR 28 east	37.0	Short-Range
	From SR 28 east to 2500' north of Chickasaw State Park	5.0	Medium-Range
	Add lanes from 2500' north of State Park to 2500' north of CR 35	18.0	Long-Range
	Add lanes 2500' north of CR35 to 1000' south of B&N railroad	17.0	Long-Range
	US 43 Bypass in Demopolis - Corridor Study	151.0	Short-Range
	US 43 Bypass from south of US 80 to US 43 south of Warrior River	7.0	Long-Range

US 43 Corridor from Demopolis to I-59	From King Bridge at Demopolis to I-59 at Eutaw - Corridor Study	1.0	Medium-Range
	(New Location) from US 11N to Approximately 500' east of I-59	5.0	Medium-Range
	(New Location) from Zion Church north to US 11	7.0	Medium-Range
	Add lanes from 2000' south of Needham Cr north to Zion Church	11.0	Medium-Range
	Add lanes from Approximately 2500' south of B&N railroad north to Forkland	8.0	Medium-Range
	Add lanes from Forkland to south approximately 2000' S of Needham	8.0	Medium-Range
	Add lanes from North King Bridge to approximately 2500' south of B&N railroad	8.0	Medium-Range
US 80 Corridor	From Mississippi State line to SR 28 southwest of Demopolis - Corridor Study for four-laning	1.0	Long-Range
	4-lane SR 8 (US 80) from SR 17 to CR 71 (Bellamy Road)	10.0	Short-Range
	4-lane SR 8 (US 80) from SR 17 to CR 71 (Bellamy Road) replace Bridges on existing 2-lanes	2.0	Short-Range
	4-lane SR 8 (US 80) from SR 28 west to SR 28 east of the Tombegbee River	43.0	Short-Range
	4-lane SR 8 (US 80) from US 11 to SR 17	24.0	Short-Range
	4-lane SR 8 (US 80) from Bellamy Road to SR 28 west of Tombigbee River	32.0	Short-Range
	Bridge replacement from CR 71 (Bellamy Road) to SR 28, west of Tombigbee River	7.0	Short-Range
	Faunsdale to US 80 at Browns	0.0	Completed
	US 80 1.5 mile west of Perry/Marengo County line 2.4 mile east of Uniontown	26.0	Long-Range
	US 80 at Coffee Creek, Mud Creek and Reliefs and Bellview Creek	1.0	Long-Range
	Relocate a section of SR 8 (US 80) into median for Historic Trail	5.0	Medium-Range

US 80 from I-85 to Phoenix City	SR 186, additional lanes from I-85 to north of US 29	11.0	Long-Range
	Additional lanes from north of US 29 to south of US 29	1.0	Long-Range
	Additional lanes from south of US 29 interchange to west of CR 24	12.0	Long-Range
	Add lanes from west of CR 24 to east of Long Branch	7.0	Long-Range
	Society Hill Bypass	10.0	Medium-Range
	Crawford Bypass west of Crawford to east of Crawford	13.0	Medium-Range
	Add lanes east of Crawford Bypass to Ladonia	22.0	Medium-Range
	Relocation from Ladonia to US 431	26.0	Long-Range
	Relocation from Ladonia to US 431 includes interchange at Auburn Road	8.0	Long-Range
US 84 Corridor	SR 12 (US 84) over Tombigbee River with relief bridges	24.0	Medium-Range
	SR 12 (US 84) relocation from CR 3 to CR 31	8.0	Medium-Range
	US 43, Grove Hill W Bypass and US 84 Connector - Corridor Study	1.0	Short-Range
	US 43 Grove Hill Western Bypass	17.0	Short-Range
	Relocation from west of Grove Hill to US 84 east	13.0	Short-Range
	West of New Clarksville Church to west of Tattilaba Cr - Passing Lanes	3.0	Short-Range
	US 84 from Bassett Creek to .38 milepost east of CR 35 south	3.0	Short-Range
	Over Alabama RR - Bridge replacement and approaches	4.0	Short-Range
	From SR 21 south of Monroeville to I-65 south of Evergreen	58.0	Long-Range
	TOTAL	**803.0**	

Figure 7 – Alabama DDHS Corridors



4.1 Highest Priorities

ALDOT's top three DDHS corridors are:

1. 4-laning US 80 from US 11 to SR 17.

This project is scheduled to begin in FY 2007 at an estimated cost of $23 million. The project includes purchasing right-of-way and construction of additional lanes to provide a 4-lane facility.

2. 4-laning US 80 from SR 17 to Bellamy Road.

This project is scheduled to begin in FY 2007 at an estimated cost of $20 million. The project includes purchasing right-of-way and construction of additional lanes to provide a 4-lane facility.

3. 4-laning US 80 from SR 28 west to SR 28 east of the Tombigbee River.

This project is scheduled to begin in FY 2007 at an estimated cost of $6.2 million. The project provides the base and pavement of the additional lanes to complete the 4-lane facility.

Arkansas

The Delta Development Highway System

P.O. BOX 2261
LITTLE ROCK, ARKANSAS 72203-2261
PHONE (501) 569-2000 FAX (501) 569-2400
WWW.ARKANSASHIGHWAYS.COM

February 13, 2007

Mr. Pete Johnson
Federal Co-Chairman
Delta Regional Authority
236 Sharkey Avenue, Suite 400
Clarksdale, MS 38614

Dear Mr. Johnson:

Reference is made to the Delta Regional Authority's study that included the Delta Development Highway System (DDHS).

The Arkansas State Highway and Transportation Department was given opportunities to provide input and comments on the development of the DDHS as it pertains to Arkansas highways. We recognize that the multi-state DDHS is an important tool to help identify and coordinate corridor development throughout the Delta Region. We appreciate the Authority's efforts in conducting this study and look forward to working with you in the future on these important transportation issues.

If additional information is needed, please advise.

Sincerely,

Dan Flowers
Director of Highways
and Transportation

c: Deputy Director and Chief Engineer
Assistant Chief Engineer-Planning

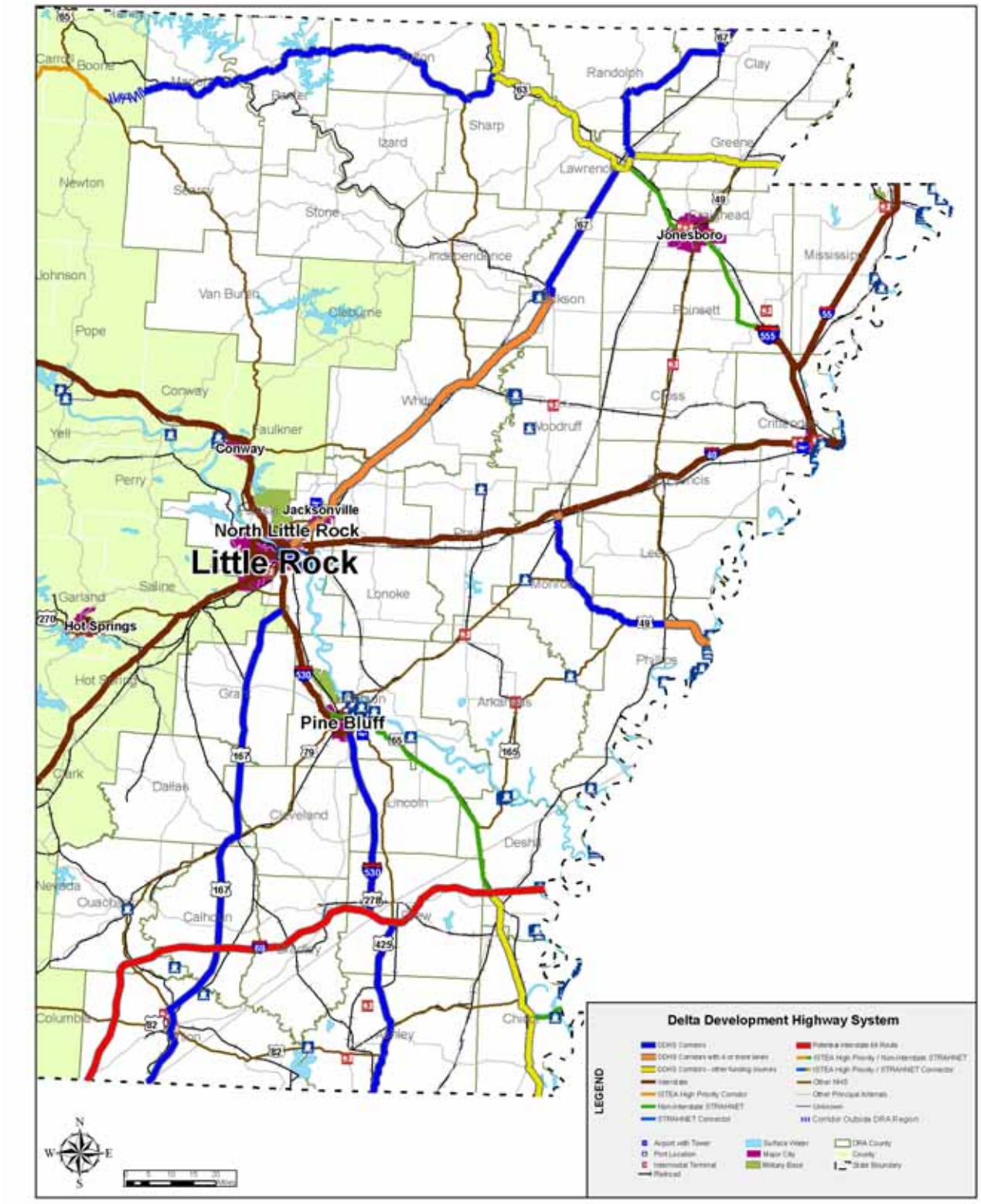
5. ARKANSAS

There are 42 counties in Arkansas that are a part of the DRA region. There are a total of 704 DDHS miles identified in Arkansas, which constitutes 18.3 percent of the total DDHS miles, of which 590 miles are 2-lane facilities. The Arkansas DDHS improvements consist of widening and upgrading portions of Highways 49, 67, 65/82, 167, 412, 425, 530 and I-69. **Table 6** provides a project description, priority and cost estimate details on each DDHS corridor in Arkansas and **Figure 8** shows the Arkansas DDHS.

Table 6 – Arkansas DDHS (planning-level cost estimates are in millions)

Corridor/ Route	Project Description	Cost Estimate (Millions)	Priority
Hwy 49	Mississippi State line to Brinkley	105.0	Medium- and Long-Range
Hwy 530	Wilmer to Pine Bluff	341.0	Short-, Medium- and Long-Range
Hwy 63	I-55 to Missouri State line	0.0	Medium-Range
Hwy 65/82	Pine Bluff to Mississippi State line	94.0	Short- and Medium-Range
Hwy 167	I-530 to Louisiana State line	370.0	Short-, Medium- and Long-Range
Hwy 65	Louisiana State line to Dumas	0.0	Long-Range
Hwy 67	Little Rock to Missouri State line	330.0	Short-Range and Long-Range
Interstate 69	Bridge over Mississippi River	518.0	Long-Range
Hwy 412	Harrison to Norfork Lake	0.0	Short-, Medium- and Long-Range
Hwy 412	Norfork Lake to Missouri Sate line	355.0	Medium- and Long-Range
Hwy 425	Louisiana State line to Monticello	162.0	Long-Range
	Arkansas TOTAL	**3,975.0**	

Figure 8 – Arkansas DDHS Corridors



5.1 Highest Priorities

As a policy, AHTD does not prioritize projects according to a numeric ranking. Once DRA funds are identified, AHTD will examine the short range DDHS projects listed in **Table 6** to determine where the money can be most appropriately used.

Illinois

The Delta Development Highway System

DELTA REGIONAL AUTHORITY

Illinois Department of Transportation
Office of the Secretary
2300 South Dirksen Parkway / Springfield, Illinois / 62764
Telephone 217/782-5597

December 6, 2006

Mr. Pete Johnson
Federal Co-Chairman
Delta Regional Authority
236 Sharkey Avenue; Suite 400
Clarksdale, MS 38614

Dear Mr. Johnson:

I want to personally thank you for allowing the Illinois Department of Transportation (IDOT) to participate in the Delta Regional Authority Transportation Study. We enthusiastically endorse and support the Delta Development Highway System (DDHS) and we look forward to working with you and your staff in the near future and improving the corridors identified in Illinois.

Sincerely,

Timothy W. Martin
Secretary

6. ILLINOIS

There are 16 counties in Illinois that are a part of the DRA region. There are a total of 174 DDHS miles identified in Illinois, which constitutes 4.5 percent of the total DDHS miles, of which 126 miles are 2-lane facilities. The Illinois DDHS improvements consist of widening and upgrading portions of IL 146/3, IL 127, IL 13, US 45 and IL 1. **Table 7** provides a project description, priority and cost estimate details on each DDHS corridor in Illinois and **Figure 9** shows the Illinois DDHS.

Table 7 – Illinois DDHS (planning-level cost estimates are in millions)

Corridor / Route	Project Description	Cost Estimate	Priority
IL 146/IL 3	4-lane Partial Access Control. IL 146 at East Cape Girardeau east to the intersection with IL 3 and IL 146; then north on IL 3/IL 146 to intersection with IL 146 continue north on IL 3 to intersection with IL 149 continue east on IL 149 to Murphysboro at the IL 13, IL 127 and IL 149 intersection	572.0	Long-Range
IL 127	4-lane Partial Access Control. IL 13, IL 127 and IL 149 intersection in Murphysboro north on IL 13/IL 127 to intersection with IL 13, IL 127 and IL 154 in Pinckneyville continue north on IL 127 to the Perry/Washington County line	366.0	Short-Range
IL 13	4-lane Partial Access Control. IL 13 from the IL 13, IL 127 and IL 149 intersection east to IL 13, US 45, IL 34, IL 145 intersection east of Harrisburg	14.0	Short-Range
US 45 and IL 1	4-lane Partial Access Control. US 45 from IL 13, US 45, IL 34, IL 145 intersection east of Harrisburg north to the US 45 and IL 1 intersection continuing north on IL 1 to the interchange with I-64	487.0	Medium-Range
	TOTAL	**1,439.0**	

Figure 9 – Illinois DDHS Corridors

6.1 Highest Priorities

IDOT's top three (3) projects regardless of cost are:

1. Construction of 4-lane expressway between IL 3 and East Cape Girardeau.

   A new bridge was recently constructed across the Mississippi River at Cape Girardeau Missouri at a cost of $130 million. Missouri constructed an expressway from this bridge connecting to I-55. Illinois constructed a 5-lane approach section through East Cape Girardeau and reduced the roadway to a rural 2-lane cross section. The proposed project will construct a 4-lane expressway from the 5-lane section at East Cape to Illinois Route 3 (approximately 2 miles). This is the logical termini of the expressway from Illinois Route 3 to I-55 in Missouri. The project has $1,485,000 Delta Funding. This funding will fund the land acquisition project for $500,000. The remaining $985,000 will be applied toward future funding to construct the project. Total Cost Estimate - $5.5 million.

2. IL 13/127 from Murphysboro to the Washington-Perry County line.

   IDOT has almost completed a Phase 1 Engineering Study on this corridor from North of Murphysboro to North of Pinckneyville. When this study is complete, land can be purchased along the corridor and final construction plans can be prepared. This project will be constructed in segments as funds become available. Original engineering funds came from TEA-21 funding.

   Given unlimited funds, the PE study limits would be extended to the Washington County line and the entire expressway constructed. Washington County segment is not in the DRA Region and thus funding would come from another source. This corridor is critical to providing an expressway from Southern Illinois to I-64. Interstate 64 provides easy access to St. Louis to the West and I-57 to the East. Total Cost Estimate - $366 million.

3. US 45 – IL 1 from Eldorado to Interstate 64.

   A 4-lane expressway in this corridor would link the Harrisburg – Eldorado area to I-64 providing critical access to the interstate highway system. Easy access to I-64 would stimulate economic development in this area. Total Cost Estimate - $487 million

IDOT's top three (3) project segments if provided a total of $15 million are:

1. Construction of 4-lane expressway between IL 3 and East Cape Girardeau.

   A new bridge was recently constructed across the Mississippi River at Cape Girardeau Missouri at a cost of $130 million. Missouri constructed an expressway from this bridge to I-55. Illinois constructed a 5-lane approach section through East Cape Girardeau and reduced the roadway to a rural 2-lane cross section. The propose project will construct a 4-lane expressway from the 5-lane section at East Cape to Illinois Route 3 (Approximately 2 miles). This is the logical termini of the expressway from Illinois Route 3 to I-55 in Missouri. The project has $1,485,000 Delta Funding. This funding will fund the land acquisition project for $500,000. The remaining $985,000 will be applied toward future funding to construct the project. Total cost estimate - $5.5 million

2. IL 13/127 from Murphysboro to the Washington-Perry County line.

   IDOT has almost completed a Phase 1 Engineering Study on this corridor from North of Murphysboro to North of Pinckneyville. When this study is complete, land can be purchased along the corridor and final construction plans can be prepared. This project will be constructed in segments as funds become available. Original engineering funds came from TEA-21 funding. This corridor is critical to providing an expressway from Southern Illinois to I-64. Interstate 64 provides easy access to St. Louis to the West and I-57 to the East.

   With funding of $15 million, the first usable segment could be constructed. Total segment length would be based on the available funds. Total Cost Estimate - $6.5 million.

3. US 45 – IL 1 from Eldorado to Interstate 64.

   A 4-lane expressway in this corridor would link the Harrisburg – Eldorado area to I-64 providing access to the interstate highway system. Easy access to I-64 would stimulate economic development in this area.

   With a Funding Level of $15 million, the Phase 1 engineering study could be completed for $3 million. The remaining funds could be used for Phase 2 engineering and land acquisition. Total Cost Estimate - $3 million

IDOT's top project segment, given $5 million:

1. Construct 4-lane expressway between IL 3 and East Cape Girardeau.

   A new bridge was recently constructed across the Mississippi River at Cape Girardeau Missouri at a cost of $130 million. Missouri constructed an expressway from this bridge connecting to I-55. Illinois constructed a 5-lane approach section through East Cape Girardeau and reduced the roadway to a rural 2-lane cross section. The propose project will construct a 4-lane expressway from the 5-lane section at East Cape to Illinois Route 3 (Approximately 2 miles). This is the logical termini of the expressway from Illinois Route 3 to I-55 in Missouri. The project has $1,485,000 Delta Funding. This funding will fund the land acquisition project for $500,000. The remaining $985,000 will be applied toward future funding to construct the project. Total Cost Estimate - $5.5 million.

Kentucky

The Delta Development Highway System

TRANSPORTATION CABINET
Frankfort, Kentucky 40622
www.kentucky.gov

Ernie Fletcher
Governor

Bill Nighbert
Secretary

Marc Williams
Commissioner of Highways

December 21, 2006

Mr. Pete Johnson
Federal Co-Chairman
Delta Regional Authority
236 Sharkey Avenue, Suite 400
Clarksdale MS 38614

Dear Mr. Johnson:

Kentucky Transportation Cabinet Secretary Bill Nighbert and I are appreciative of the efforts of the Delta Regional Authority to focus on transportation, along with rural health and information technology, as its three major policy development areas. Within the Commonwealth of Kentucky, the priority highway segments we have identified on US 60, the US 68/KY 80/KY 121 corridor, and the emerging I-69 corridor are essential elements in our transportation system for Kentucky's part of the designated Delta Region. Development along these three corridors and improved connections to our neighbors in Indiana near Evansville and to the I-55 corridor near Wickliffe are vital not only for Kentucky's economy but also to facilitate essential transportation movements in times of national emergencies.

Best wishes as you continue your efforts.

Sincerely,

Marc D. Williams, P.E.
Commissioner of Highways

MDW/BSS/NH

c: Jeff Carroll, Wilbur Smith Associates
Marcie Mathews, State Highway Engineer
Ray Polly, Deputy State Highway Engineer for Project Development
Daryl J. Greer, Director–Division of Planning

7. KENTUCKY

There are 21 counties in Kentucky that are a part of the DRA region. There are a total of 230 DDHS miles identified in Kentucky, which constitutes 6 percent of the total DDHS miles, of which 65 miles are 2-lane facilities. The Kentucky DDHS improvements consist of widening and upgrading portions of US 60, US 68/KY 80/KY 121, and I-69. **Table 8** provides a project description, priority and cost estimate details on each DDHS corridor in Kentucky and **Figure 10** shows the Kentucky DDHS.

Table 8 – Kentucky DDHS (planning-level cost estimates are in millions)

Corridor / Route	Project Description	Cost Estimate	Priority
US 60	New US 60 Bridge to replace existing US 51 bridge at Wickliffe	300.0	Short-Range
I-69	New bridge between Evansville, Indiana and Henderson, Kentucky	325.0	Short-Range
US 60	Widening to 4-lanes remaining sections of US 60 between Wickliffe and Kevil	140.0	Short-Range
US 68/ KY80/KY121	Widen to 4-lanes US 68/KY80/KY121 between Cadiz and Mayfield	50.0	Short-Range
I-69	Upgrade Approximately 135 Miles of Parkways to Interstate Standards	270.0	Medium-Range
	TOTAL	**1,385.0**	

7.1 Highest Priorities

KYTC's top three (3) projects regardless of cost are:

1. US 60 bridge to replace US 51 bridge at Wickliffe,
2. I-69 New bridge between Evansville, Indiana and Henderson, Kentucky, and
3. US 60 widening to 4-lanes between Wickliffe and Kevil.

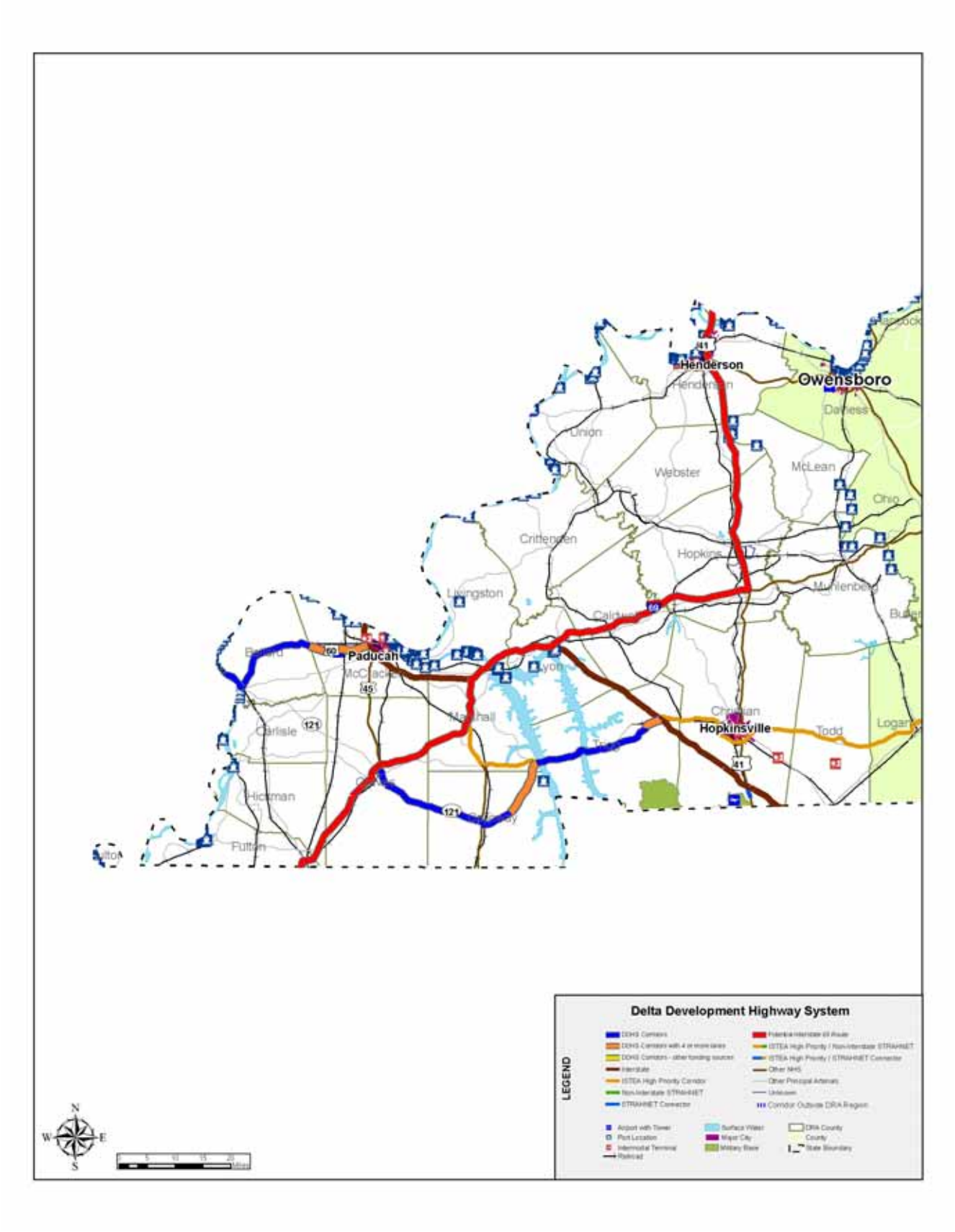
KYTC's top three (3) project segments if provided a total of $15 million are:

1. 4-Lane US 60 from 1 mile east of Denis Johns Road to Bethel Church Road (includes Kevil Bypass).
    a. Right of Way phase: $9.5 million, and
    b. Utility Relocation phase: $ 5.5 million.

KYTC's top project segment, given $5 million:

1. Right of way cost of $9.5 Million for 4-Lane US 60 from 1 mile east of Denis Johns Road to Bethel Church Road (includes Kevil Bypass).

Figure 10 – Kentucky DDHS Corridors



Louisiana

The Delta Development Highway System

KATHLEEN BABINEAUX BLANCO
GOVERNOR

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
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Baton Rouge, Louisiana 70804-9245
www.dotd.louisiana.gov
(225) 379-1200

JOHNNY B. BRADBERRY
SECRETARY

January 3, 2007

Mr. Pete Johnson
Federal Co-Chairman
Delta Regional Authority
236 Sharkey Avenue, Suite 400
Clarksdale, MS 38614

Subject: Delta Economic Development Highway System

Dear Mr. Johnson:

I am writing to express the support of the Louisiana Department of Transportation and Development (LA DOTD) for the goals of the Delta Regional Authority to improve the quality of life of the Mississippi Delta Region, and foster partnerships that will have a positive impact on the region's economy. Specifically, we support the establishment of the Delta Economic Development Highway System, and efforts to implement improvements to that highway network.

We appreciate the opportunity to participate in the identification of this important highway network. We all recognize that an efficient transportation system is critical to the economic growth of the Delta Region.

We look forward to working with the other states in the Delta Region and with the Delta Regional Authority to improve the standard of living of our citizens in this area.. If I can be of further assistance, please contact me at (225) 379-1200, or Dr. Eric Kalivoda, Assistant Secretary, Office of Planning and Programming at (225) 379-1248.

Sincerely,

Johnny B. Bradberry
Secretary

pc: Governor Kathleen Babineaux Blanco
Mr. Sam Jones
Mr. Cedric Grant
Dr. Eric Kalivoda
Mr. Jeff Carroll, Wilbur Smith Associates

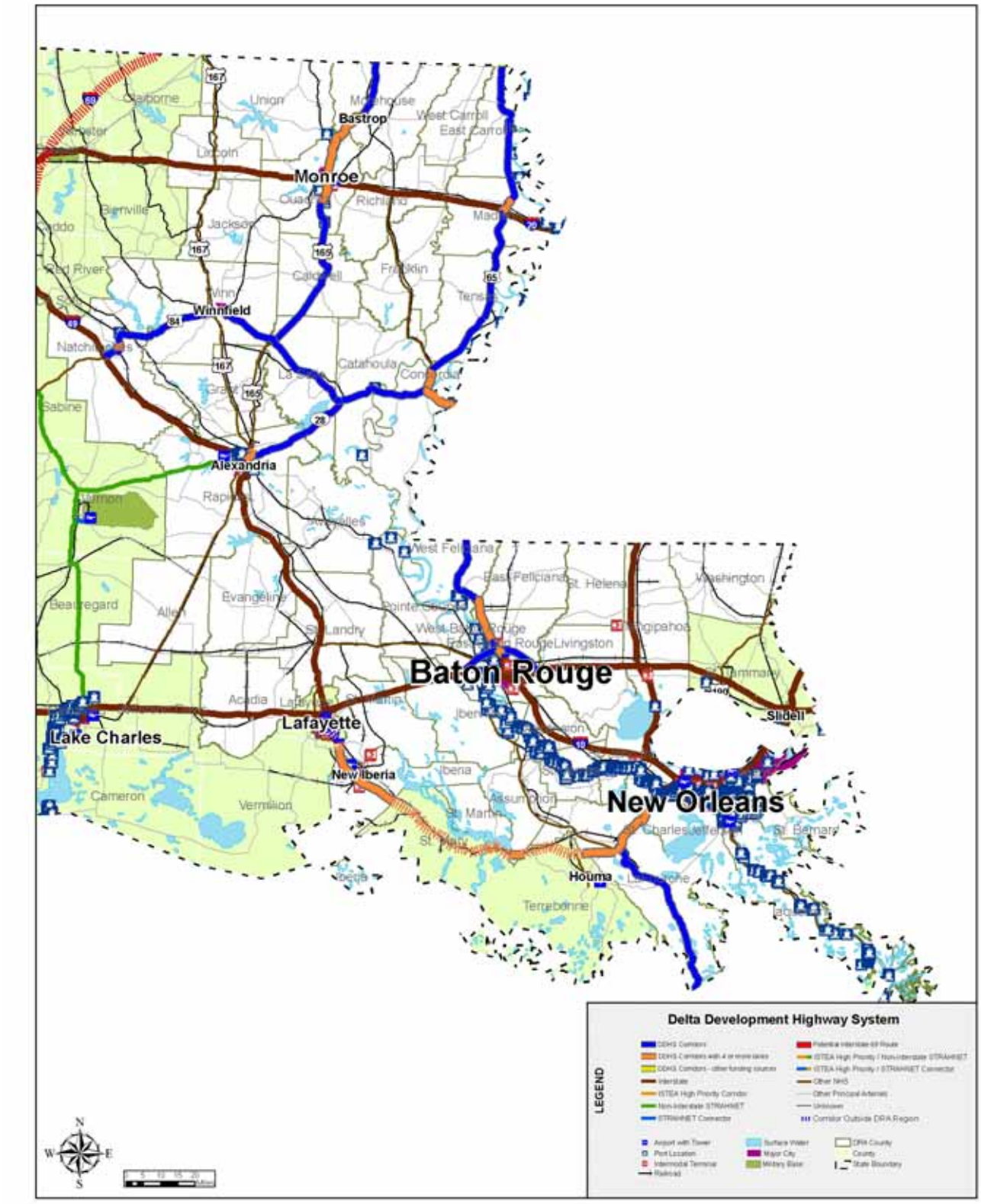
8. LOUISIANA

There are 48 parishes in Louisiana that are a part of the DRA region. There are a total of 591 DDHS miles identified in Louisiana, which constitutes 15.4 percent of the total DDHS miles, of which 484 miles are 2-lane facilities. The Louisiana DDHS improvements consist of widening and upgrading portions of US 90 (future I-49, Baton Rouge North Bypass (new construction), US 61, US 65, US 84, LA 6, LA 1, LA 3235 and LA 28. **Table 9** provides a project description, priority and cost estimate details on each DDHS corridor in Louisiana and **Figure 11** shows the Louisiana DDHS.

Table 9 – Louisiana DDHS (planning-level cost estimates are in millions)

Corridor / Route	Project Description	Cost Estimate	Priority
US 90/ Future I-49 St. Martin, Iberia, Lafourche, St. Charles, and Jefferson Parishes	Existing 4-Lane Upgrade to Interstate	1,643.0	Short-Range
US 90/ Future I-49 Assumption Parish	Existing - Full Interstate Standards	0.0	
Baton Rouge Interstate North By-Pass	New Interstate By-Pass	910.0	Medium - Range
US 61 Business Route Mississippi State line	4-Lane	0.0	
US 65 US 84 – Arkansas State line	4-Lane	412.0	Long-Range
US 165/US 425 US 84 – Arkansas State line	4-Lane	0.0	
LA 6 & US 84 I-49-Mississippi State line	4-Lane	460.0	Long-Range
LA 28; Alexandria - US 84	4-Lane	128.0	Medium-Range
LA 1- Leeville to Port Fourchon (under construction) Golden Meadow to Leeville	Elevated 2-lane	220.0	Short-Range
LA 3235: Golden Meadow to U.S. 90/ Future I-49	4-Lane	1,000.0	Long-Range
	Total	**4,773**	

Figure 11 – Louisiana DDHS Corridors



8.1 Highest Priorities

LA DOTD's top three (3) projects regardless of cost are:

1. US 90/Future I-49 - upgrade to Interstate in Delta parishes of St. Martin, Iberia, Lafourche, St. Charles, and Jefferson parishes. Total Cost Estimate - $1,643 million.
2. LA 1 and LA 3235 - from Port Fourchon to US 90/Future I-49. Total Cost Estimate - $1,220 million.
3. U.S. 84 - Archie, LA to Ferriday, LA - this is a portion of the "LA 6 & US 84 - I-49 to Mississippi State line" corridor. The estimated cost for this section only is $67 million.

LA DOTD's top three (3) project segments if provided a total of $15 million are:

1. LA 1 - Leeville to Port Fourchon - use this $15 million as additional funding support for the project currently under construction, or the soon to be let project (the elevated 2 lanes from the new bridge under construction at Leeville to Port Fourchon).
2. U.S. 84 - Archie, LA to Ferriday, LA (as described above) - could use the $15 million to complete design and perhaps acquire right-of-way.
3. U.S. 90/I49 - use $15 million for frontage road and interchange construction on projects in the DOTD program

LA DOTD's top project segment, given $5 million:

1. U.S. 65 - from U.S. 84 to Arkansas State line - use $5 million on isolated pavement and safety improvements along this corridor.

Mississippi

The Delta Development Highway System

Harry Lee James
Deputy Executive Director/
Chief Engineer

Brenda Znachko
Deputy Executive Director/
Administration

MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Larry L. "Butch" Brown
Executive Director

Ray Balentine
Director
Office of Intermodal Planning

Willie Huff
Director
Office of Enforcement

P. O. Box 1850 / Jackson, Mississippi 39215-1850 / Telephone (601) 359-7249 / FAX (601) 359-7110 / GoMDOT.com

December 6, 2006

Mr. Pete Johnson
Federal Co-Chairman
Delta Regional Authority
236 Sharkey Avenue
Clarksdale, MS 38614

SUBJECT: **Delta Regional Authority Transportation Study**

Dear Mr. Johnson:

Please accept my thanks and appreciation for the opportunity to participate in the Delta Regional Authority's Transportation Study. As the Executive Director of the Mississippi Department of Transportation, I fully understand and appreciate the significance of transportation as a critical component of economic growth and development. Your agency's work to identify and designate the Delta Economic Development Highway System (DDHS) is a crucial step towards realizing the great potential of the Delta Region.

We at MDOT are committed to continuing the partnership with DRA that can bring about improvements to the quality of life for our citizens. I look forward to the opportunity to see the DDHS being successfully implemented.

Sincerely,

Larry L. "Butch" Brown
Executive Director

LLB:WRB:de

PC: Mr. Jeffrey Carroll, Wilbur Smith Associates
Mr. Jeff Pierce, State Planning Engineer, MDOT

O:\Administration\Balentine\DDHS Co-Chair ltr.doc

9. MISSISSIPPI

There are 45 counties in Mississippi that are a part of the DRA region. There are a total of 753 DDHS miles identified in Mississippi, which constitutes 19.6 percent of the total DDHS miles, of which 556 miles are 2-lane facilities. The Mississippi DDHS improvements consist of widening and upgrading portions of I-69, US 49, US 61, SR 6/US 278, SR 22, and SR 1. **Table 10** provides a project description, priority and cost estimate details on each DDHS corridor in Mississippi and **Figure 12** shows the Mississippi DDHS.

Table 10 – Mississippi DDHS (planning-level cost estimates are in millions)

Corridor / Route	Project Description	Cost Estimate	Priority
US 49	Provide Full Access Control from Covington/Forest County line to Florence	623.0	Short-Range
US 49	Florence Bypass - Full Control	277.0	Short-Range
US 49	Add 2 lanes from Mississippi River Bridge to US 61	43.0	Short-Range
SR 6/US 278	Add 2 lanes 5.15 miles west of I-55 to 3.11 miles east of I-55	3.0	Short-Range
SR 6/US 278	Add 2 lanes from MS 61 to 5.15 miles west of I-55	127.0	Short-Range
I-69	Grade Drain Pave from SR 305 to Marshall County line - Full Control	282.0	Short-Range
I-69	4-lane from Robinsonville to Benoit - Full Control	1,458.0	Medium-Range
I-69	Grade Drain Pave 4-lane BR Benoit to Arkansas State line - Full Control	198.0	Medium-Range
SR 22	Add 2-lanes from I-20 to I-55	170.0	Medium-Range
US 61	Add 2-lanes from SR 3 to US 82	256.0	Medium-Range
US 61	Add 2-lanes from Natchez Trace to 4-lane section north of Port Gibson	18.0	Long-Range
SR 1	Add 2-lanes from end of 4-lane in Greenville to I-69	38.0	Long-Range
	TOTAL	**3,602.0**	

9.1 Highest Priorities

MDOT's top three (3) projects regardless of cost are:

1. US 49,
2. SR 6/US 278, and
3. I-69.

MDOT's top three (3) project segments if provided a total of $15 million are:

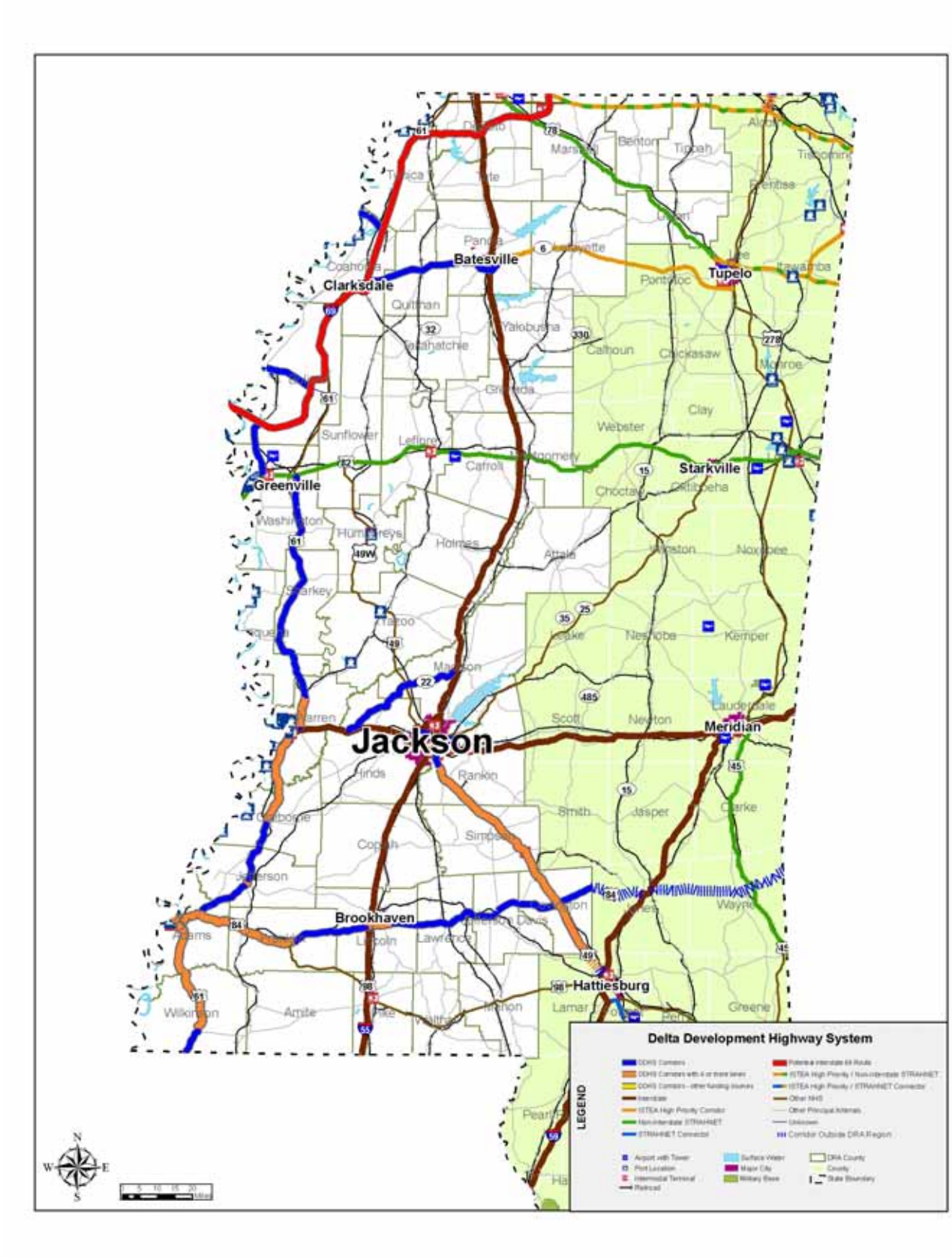
1. SR 6/US 278 between Bates Street and SR 35 S and, SR 6/US 278 from US 61 to Quitman County line,
2. SR 6/US 278 from Quitman County line to SR 35 S, and
3. SR 6/US 278 from Coahoma County line to SR 316.

MDOT's top project segment if provided a total of $5 million.

1. SR 6/278 between Bates St. and SR 35 S, and SR 6/278 from US 61 to Quitman County line.

SR 6/US 278 – This project will construct four-lanes from Batesville to US 61 near Clarksdale. The completion of the route will provide economic opportunities for the region as well as providing a new vital section of 4-lane to US 278, which is currently 4 lanes or under construction through the majority of the state.

Figure 12 – Mississippi DDHS Corridors



Missouri

The Delta Development Highway System

Missouri
Department
of Transportation

MoDOT

Pete K. Rahn, Director

105 West Capitol Avenue
P.O. Box 270
Jefferson City, MO 65102
(573) 751-2551
Fax (573) 751-6555
www.modot.org

December 22, 2006

Mr. Pete Johnson
Federal Co-Chairman
Delta Regional Authority
236 Sharkey Ave
Suite 400
Clarksdale, MS 38614

Mr. Jeff Carroll
Wilbur Smith Associates
1301 Gervais Street
Columbia, SC 29202-3356

RE: Delta Regional Authority Transportation Study

Dear Messrs. Johnson and Carroll:

The Missouri Department of Transportation is pleased to announce our support for the study that was conducted by the Delta Regional Authority, with Wilbur Smith Associates, to develop the Delta Development Highway System.

Our central planning division, as well as our affected districts, was provided with opportunities to provide input and comments to the study as it pertained to Missouri. We recognize that the multi-state Delta Development Highway System is an important tool to help identify and coordinate corridor development throughout the Delta Region.

Sincerely,

Pete K. Rahn
Director

Copy: Ms. Machelle Watkins-tp

j:\wilkir\DRA Study Endorsement Letter.doc

Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.

10. MISSOURI

There are 30 counties in Missouri that are a part of the DRA region. There are a total of 566 DDHS miles identified in Missouri, which constitutes 14.7 percent of the total DDHS miles, of which 346 miles are 2-lane facilities. The Missouri DDHS improvements consist of widening and upgrading portions of US 60, US 63, US 67, US 412 and MO 8. **Table 11** provides a project description, priority and cost estimate details on each DDHS corridor in Missouri and **Figure 13** shows the Missouri DDHS.

Table 11 – Missouri DDHS (planning-level cost estimates are in millions)

Corridor / Route	Project Description	Cost Estimate	Priority
US 63	Existing 4-lanes from Route 60 to West Plains	0.0	n/a
	Add climbing lanes from West Plains to Thayer	10.0	Short-Range
	Existing 4-lanes from Thayer to Arkansas State line	0.0	n/a
US 60	Existing 4-lanes from Springfield to Willow Springs	0.0	n/a
	Add lanes for 4-lane facility from Willow Springs to Route B in Carter County	118.0	Short-Range
	Existing 4-lanes from Route B in Carter County to 1-55	0.0	n/a
US 67	Existing 4-lanes from 1-55 to Fredericktown	10.0	Short-Range
	Add lanes for 4-lane facility from Fredericktown to north of Poplar Bluff	190.0	Short-Range
	Improvements from south of Poplar Bluff to Arkansas	37.0	Medium-Range
US 412	Existing 4-lanes from 1-55 to Dunklin County	0.0	n/a
	Add lanes for 4-lane facility from Pemiscot County to Kennett	0.0	n/a
	Improvements from Kennett to Arkansas State line	44.0	Long-Range
MO 8	Add lanes from I-44 to Route 67	173.0	Long-Range
	TOTAL	**582.0**	

10.1 Highest Priorities

MoDOT's top three (3) projects regardless of cost are:

1. US 67 Four-laning from Fredericktown to north of Poplar Bluff. This corridor improvement will add two-lanes to provide a divided four-lane highway. This improvement is part of a larger effort to upgrade Route 67 to a four-lane facility from I-55 south of St. Louis to Poplar Bluff. Route 67 is already a four-lane facility for 50 miles from I-55 at Crystal City/Festus to Fredericktown. This improvement is included in Missouri's STIP and will upgrade the remaining 50 miles to a four-lane facility from Fredericktown to Poplar Bluff. Portions of this improvement are under construction, with the remaining sections scheduled to begin construction in 2007, 2008, and 2009. The corridor improvement is currently estimated to cost $168 million. The Highway 67 Corporation, for the City of Poplar Bluff, and the US Army Corps of Engineers are providing approximately $85 million for this project. This project has received approximately $15.5 million in SAFETEA-LU allocation, as well as $3 million in previous DRA allocations. MoDOT requests an additional $10 million in DRA funds for this project.

2. US 60 Improvements from Willow Springs to Poplar Bluff.

   This corridor improvement will add two-lanes to provide a divided four-lane highway, and will improve the existing two-lanes. This improvement is part of a larger effort to upgrade Route 60 to four-lane facility from Springfield to Sikeston. Route 60 is already a four-lane facility from Springfield to Willow Springs and from Poplar Bluff to Sikeston. This improvement is included in Missouri's STIP and will upgrade the remaining section from Willow Springs to Poplar Bluff. Portions of this improvement are under construction, with the remaining sections scheduled for construction in 2007 and 2008.

   The corridor improvement is currently estimated to cost $130 million. The project has received approximately $3.5 million in federal appropriations. MoDOT requests an additional $10 million in DRA funds for this project.

3. US 67 and Orchard Road interchange in Bonne Terre, St. Francois County.

   This project will add an interchange to Route 67 at Orchard Road in Bonne Terre. This project is part of a larger effort to upgrade Route 67 from expressway to freeway standards from Bonne Terre to Farmington. This improvement is included in Missouri's STIP and is scheduled to begin construction in 2008. This project is currently estimated to cost $10.7 million. This project received approximately $3 million in federal allocation. MoDOT requests an additional $8 million in DRA funds for this project.

MoDOT's top three (3) project segments if provided a total of $15 million are:

1. Route 67 four-laning - Request $5 million,
2. Route 60 Upgrade - Request $5 million, and
3. Route 67 and Orchard Road Interchange - Request $5 million.

MoDOT's top project segment if provided a total of $5 million.

MoDOT prefers to split the $5 million between the three projects as follows:

1. Route 67 four-laning - Request $2 million,
2. Route 60 Upgrade - Request $1 million, and
3. Route 67 and Orchard Road Interchange - Request $2 million.

Figure 13 – Missouri DDHS Corridors

Tennessee

The Delta Development Highway System

DELTA REGIONAL AUTHORITY

DEPARTMENT OF TRANSPORTATION
SUITE 700, JAMES K. POLK BUILDING
NASHVILLE, TENNESSEE 37243-0349
(615) 741-2848

GERALD F. NICELY
COMMISSIONER

PHIL BREDESEN
GOVERNOR

January 5, 2007

Mr. Pete Johnson
Federal Co-Chairman
Delta Regional Authority
236 Sharkey Avenue
Suite 400
Clarksdale, MS 38614

Dear Mr. Johnson:

The Department would like to thank the Delta Regional Authority (DRA) for its assistance in promoting the Delta Development Highway System.

We fully support your mission to improve the economy and transportation network in the eight-state Delta Region, and are happy to participate in this worthwhile endeavor.

We look forward to our continuing joint involvement in the development of the Delta Region.

Sincerely,

Gerald F. Nicely

Gerald F. Nicely
Commissioner

GFN:RS/gf

11. TENNESSEE

There are 21 counties in Tennessee that are a part of the DRA region. There are a total of 442 DDHS miles identified in Tennessee, which constitutes nearly 11.5 percent of the total DDHS miles, of which 392 miles are 2-lane facilities. The Tennessee DDHS improvements consist of widening and upgrading portions of US 45E/SR 43, US 64/SR 15, US 412/SR 20, I-69 and I-269. **Table 12** provides a project description, priority and cost estimate details on each DDHS corridor in Tennessee and **Figure 14** shows the Tennessee DDHS.

Table 12 – Tennessee DDHS (planning-level cost estimates are in millions)

Corridor / Route	Project Description	Cost Estimate	Priority
US 45E/SR 43	Milan eastern bypass, SR 43, south of Milan to SR 43, north of Milan, Gibson County	50.0	Short-Range
US 64/SR 15	Somerville bypass, SR 15, Fayette County	28.0	Short-Range
US 64/SR 15	Boliver bypass, SR 15, west of Boliver to SR 15, east of Boliver, Hardiman County.	69.0	Short-Range
US 64/ SR 15	East of Margin Street, Boliver, to Hornsby Loop Road, Hardeman County	35.0	Short-Range
US 64/SR 15	McClintock Road, Hardeman County, to SR 225, McNairy County	28.0	Short-Range
US 64/SR 15	SR 225 to Sandy Flat Road, McNairy County	21.0	Short-Range
US 64/SR 15	Sandy Flat Road to SR 5/US45, Selmer, McNairy County	29.0	Short-Range
US 64/SR 15	5-lane, Savannah, to Firetower Road, McNairy County	25.0	Short-Range
US 64/SR 15	Firetower Road to Bigbee Branch in Hardin County	36.0	Short-Range
I-69 and I-269	Mississippi State line to Kentucky State line	1,490.0	Long-Range
US 412/ SR 20	From US70/SR 1, in Jackson, to the Tennessee River, plus the 0.44 mile portion, of US 70/SR 1, connecting US 412/SR 20 to I-40, in Jackson County	102.0	Short-Range
	TOTAL	**1,913**	

11.1 Highest Priorities

TDOT's top three (3) projects regardless of cost are:

1. SR 385/proposed I-269, from Mississippi State line to US64/SR 15, Shelby County
    - New four-lane road will complete SR 385/proposed I-269 regional major corridor – 11.6 total miles.
    - Phases: Staged construction to be started in, and continued, from Calendar Year (CY) 2007.
    - TDOT is requesting funding to complete project, currently estimated at $175 million.
2. US64/SR 15, from west of Somerville, Fayette County to Wayne County line
    - Construction and reconstruction of the US64/SR 15 four-lane corridor being developed to connect the Memphis region to I-24 west of Chattanooga, designated as a strategic regional corridor in the State's Long-range Transportation Plan – 40 total miles.
    - Phases: Staged construction to be started in, and continued, from CY 2007.
    - TDOT is requesting funding to complete corridor, currently estimated at $281 million.
3. US412/SR 20, from I-40 in Jackson, Madison County to the Tennessee River.
    - Reconstruction of two- to four-lanes, and new location, will continue completion of the US412/SR 20 regional strategic corridor – 43 total miles.
    - Phases: Staged construction to be started in, and continued, from CY 2007.
    - TDOT is requesting funding to complete corridor, currently estimated at $102 million.

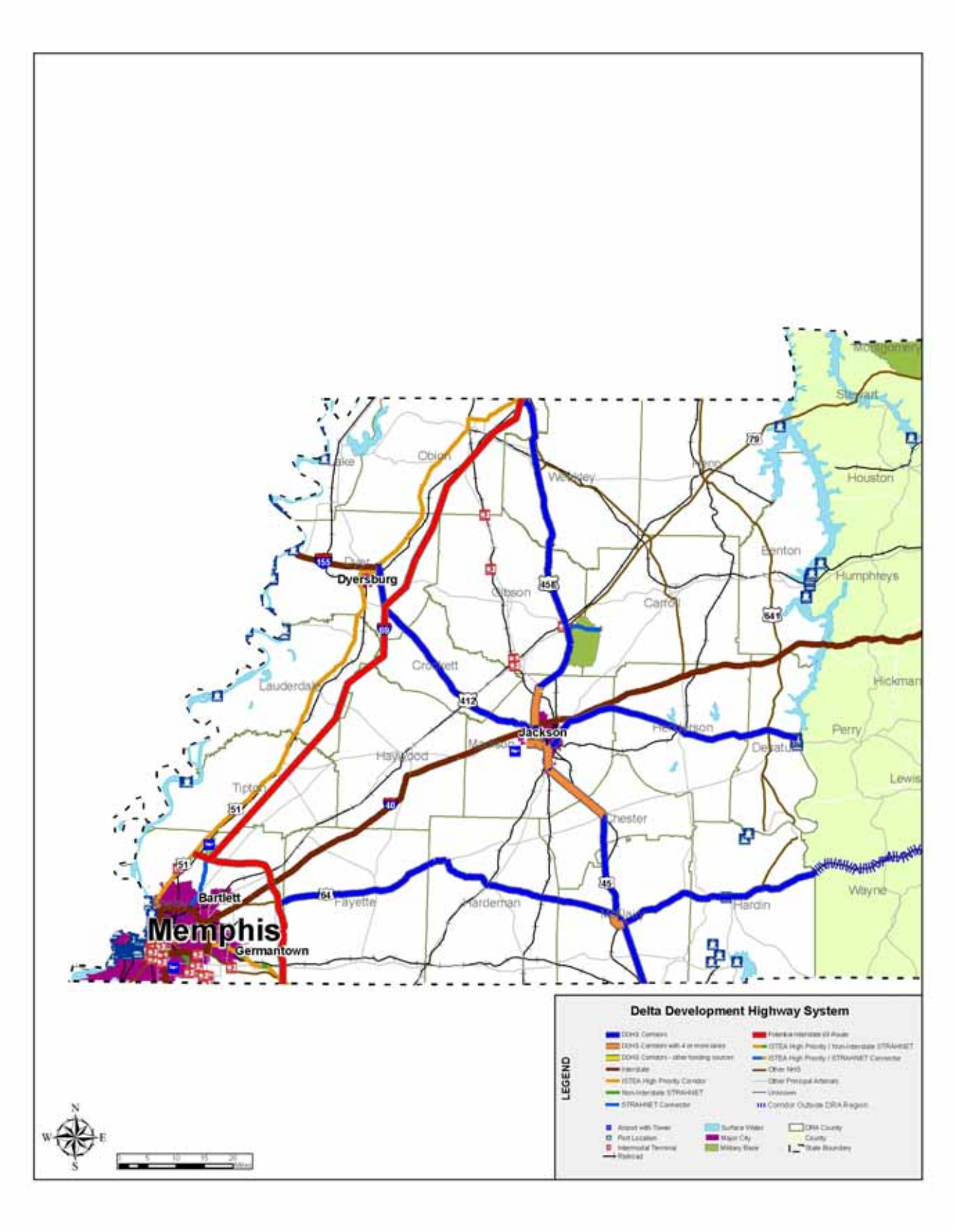
TDOT's top three (3) project segments if provided a total of $15 million are:

1. Cost share construction costs for Project 1: Route SR 385/proposed I-269, from Mississippi State line to US64/SR 15, Shelby County, currently estimated at $175 million.

TDOT's top project segment if provided a total of $5 million.

1. Cost share construction costs for Project 1: Route SR 385/proposed I-269, from Mississippi State line to US 64/SR 15, Shelby County, currently estimated at $175 million.

Figure 14 – Tennessee DDHS Corridors



Appendix

The Delta Development Highway System

APPENDIX A - REFERENCES

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February 2007

Viksburg Bridge image provided by
Author: Aurelio A. Heckert

The Delta Development Highway System

Prepared by
The Delta Regional Authority

Wilbur Smith Associates

Michael Baker Jr., Inc.

Neel-Schaffer, Inc.